

BRIGHAM YOUNG  
UNIVERSITY



Annual Catalog Issue  
1955-56

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# Brigham Young University Quarterly



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*Karl G. Maeser Memorial Building*

# Objectives

. . . seek ye out of the best books words of wisdom:  
seek learning even by study, and also by faith.

—Doctrine and Covenants, Sec. 88, v. 118

David O. McKay, President of the Church of Jesus Christ of Latter-day Saints, has stated that the following should be the objectives of a student at the Brigham Young University:

1. Become aware of one's own ignorance and gain humility in contemplating how infinite God's creations are.
2. Increase one's knowledge, selecting those facts and truths which will be most valuable and realizing that exact and definite knowledge is always of the greatest possible value and importance to every individual who has the moral courage to use it rightly.
3. Learn that acquisition of knowledge will result only from personal effort, not from superficial study or shirking.
4. Realize the responsibility one has because of free agency, of individual choice. The opportunity for rising above the plane of animal existence is open to all who will choose it.
5. Come to a knowledge that the purpose of life is not mere existence or pleasure or fame or wealth, but the perfection of humanity through individual achievement under the guidance of God's inspiration.

It has been the aim of the University to encourage students to realize these objectives, objectives closely allied to and derived from the basic philosophy of Mormonism: man, the son of God, is a free agent with unlimited possibilities for eternal development under God's guidance; a never-ending search for truth and for an understanding of the truth should be among the activities of those who aspire to perfection.

# Brigham Young University -- Past and Present

## History of the University

**Founding and Philosophy.** Brigham Young University was established pursuant to a deed of trust executed by Brigham Young, President of the Church of Jesus Christ of Latter-day Saints, on October 16, 1875. That deed expressly set forth that the "pupils shall be instructed in . . . such branches as are usually taught in an academy of learning," and also "in the Old and New Testaments, the Book of Mormon and the Book of Doctrine and Covenants."

A group of seven persons appointed by President Young comprised the first Board of Trustees. They were: Abraham O. Smoot, President of Utah Stake of the Church, which embraced all of Utah County, William Bringhurst of Springville, Leonard E. Harrington of American Fork, and Wilson H. Dusenberry, Martha J. Coray, Myron Tanner, and Harvey H. Cluff of Provo, all prominent members of Utah Stake.

At a meeting November 22, 1875, the Board of Trustees organized the Academy. At that time the Timpanogos Branch of the University of Deseret had just been discontinued, and it was too late in the year to arrange a complete school year. Consequently the board decided to hold two preliminary terms of the Brigham Young Academy. Warren N. Dusenberry, who had been Principal of the Timpanogos Branch, was selected to become Principal of the Academy. After conducting the first preliminary term, which ended April 15, 1876, he resigned to practice law.

Ten days later, President Brigham Young, acting for the Board of Trustees, requested Dr. Karl G. Maeser, a convert to the Church from Germany, to come to his office. "Brother Maeser," said the President, "I have another mission for you. We have been considering the establishment of a Church school, and are looking around for a man—a man to take charge of it. You are the man, Brother Maeser. We want you to go to Provo to organize and conduct an Academy to be established in the name of the Church—a Church School."

A few days later, Dr. Maeser called at the office of President Young and said, "President Young, I am ready to go to Provo. What are my instructions?"

"Only this," replied the President. "I want you to remember that you ought not to teach even the alphabet or the multiplication tables without the spirit of God. That is all. God bless you. Goodbye."



Dr. Maeser accepted this all-embracing charge, believing that the ultimate good in education could be summed up in the words of the Master: "Be ye perfect, even as your Father in Heaven is perfect." In one of his memorable sermons, Dr. Maeser stated the real purpose of the school by saying, "Not by bread alone, neither for bread alone does man live. There are higher objectives yet to be attained, other truths to be learned, and greater work to be done." Years later, consistent with that philosophy, the school adopted as its motto this revelation of the Lord: "The Glory of God is Intelligence."\*

\*Doctrine and Covenants, Section 93.

**Administration of Karl G. Maeser.** Karl G. Maeser served as principal of the Academy from April 24, 1876, to January 4, 1892, a period of 16 years.

He had received intensive training in the excellent German schools of his time. He was a graduate of the Dresden Gymnasium and of the normal schools of Friedrichstadt, Germany. At the time of his conversion to the Church, he was Vice-Director of the Budich Educational Institute at Dresden.

Neither Warren N. Dusenberry, nor Dr. Karl G. Maeser had much academic assistance at the beginning of school. When Dr. Maeser began his teaching at Brigham Young Academy, he was Principal and the sole teacher of the twenty-nine students, most of them from Utah County.

The old Lewis Building, which stood on the corner of Third West and Center Streets, was the first home of the Brigham Young Academy. This building was later described by Justice George Sutherland of the United States Supreme Court, one of the Academy's first students, as being a "structure without beauty or grace or any other aesthetic feature calculated to invite a second look . . . It consisted of one large room and a stage—both so utterly bare and gloomy as to make inappropriate any form of entertainment except tragedy."

By 1882 this building was found to be inadequate for the needs of the school, and additional rooms were built from funds provided by A. O. Smoot, Harvey H. Cluff, Myron Tanner, and W. H. Dusenberry. However, this structure was entirely destroyed by fire January 27, 1884. Temporary quarters were obtained, and the school continued with the loss of only one day of school. During the summer of 1884 arrangements were made with Z.C.M.I. for the use of the upper floor and part of the lower floor of its warehouse on University Avenue.

Members of the Board of Trustees were appointed by Brigham Young until his death in 1877, when this responsibility fell upon his heirs.

The transition of the Brigham Young Academy into the University of the Church has been marked by periods of great financial distress. Brigham Young died before he had provided for the endowment of the institution. This left the school without any assured source of income.



*The Heber J. Grant Library*

In the early days of the school, when no funds for the budget could be found, the Board actually considered closing the Academy. It was then that Professor Maeser and his faculty showed their loyalty by teaching for anything they could get, including agricultural products, which were accepted from students in lieu of cash tuition.

President A. O. Smoot of Utah Stake was equally loyal. In the winter of 1887, to bolster up a shrinking enrollment, he asked each member in attendance at a Stake Priesthood meeting to pay the tuition of at least one student at the Academy. On leaving before the close of the meeting, he told the Priesthood assembled that they might name the sum he should pay and he would abide by the decision. Members of the Academy faculty readily responded to the call. One faculty member, who was teaching his first year at a salary of twenty dollars per month, paid a quarter's tuition for one student.

On June 8, 1888, President Wilford Woodruff organized a General Board of Education of the Church, consisting of nine members. This Board directed the activities of the school, but the power of appointment of the Board of Trustees still remained with

the heirs of Brigham Young until July 18, 1896, when, by the adoption of the Articles of Incorporation for the University, the right of appointment was granted to the First Presidency of the Church through the consent of the heirs of Brigham Young. By this action, the Church assumed the indebtedness of the institution and accepted the responsibility of maintaining Brigham Young University.

On January 4, 1892, the school was moved to what is now known as the Education Building, the first structure built especially for the University. Much of the \$75,000 it cost was made available through the personal credit of President A. O. Smoot, a member of the Board of Trustees at that time.

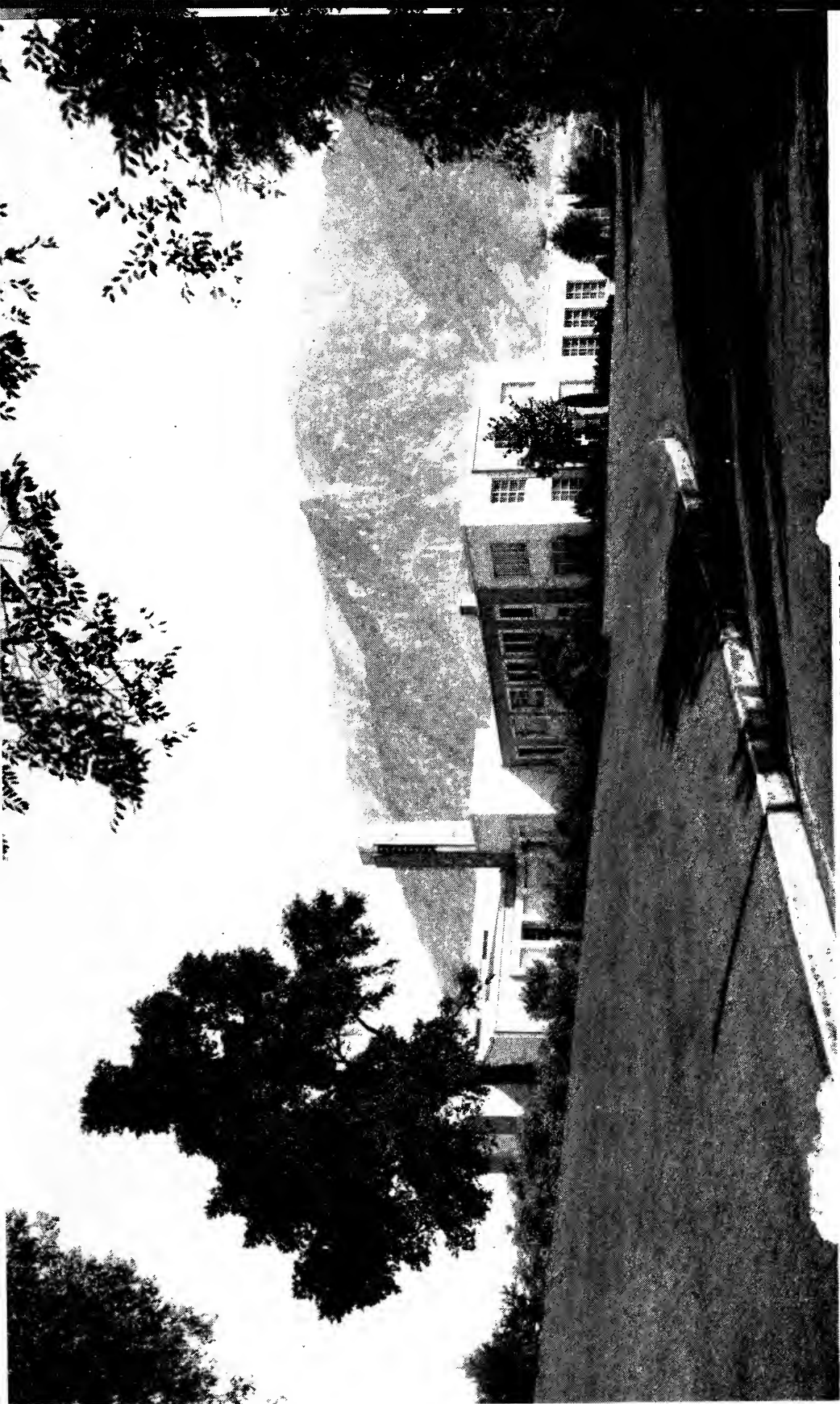
Dr. Maeser's administration will be remembered primarily because of his masterful teaching. His legacy to the Church school system consisted of three ideals: (1) the acquirement of intelligence by academic studies; (2) the development of character; and (3) a reverence for the revealed word of God, together with a living testimony of the divinity of the message of the Church which he represented. He often stated that "no infidel" would go out from his school, and it is doubtful whether any did. His sermons were classics which lived with his students throughout their lives. He was the great spiritual architect of the school.

**Administration of Benjamin Cluff.** Benjamin Cluff, a former student of Karl G. Maeser, served as President from January 4, 1892, to December 23, 1903. He was one of the first native Utahns to earn a college degree, having received it from the University of Michigan in 1890. He influenced many young men and women to go to larger universities in pursuit of higher learning. Some of them later became teachers at the Brigham Young University.

His administration was effective in changing the school from one which was still largely a normal school, with a very small college department, to the University.

After 1892, President Cluff asked the Church authorities to provide another building to house the growing student body properly. As the Church was not prepared to furnish the money, Reed Smoot, chairman of the Executive Committee of the Board, took the initiative and secured the contribution of one thousand dollars each from Wilford Woodruff, George Quayle Cannon, Joseph Fielding Smith, Reed Smoot, Jesse Knight, Charles Edwin Loose, Alfred William McCune, Amanda Inez Knight, Stephen L. Chipman, and Jesse William Knight. The cost of the building exceeded ten thousand dollars, but Reed Smoot subscribed the additional amount to cover the expense. It was named College Building. Dedication was held in connection with commencement week in 1898.

The financial panic of 1893 further intensified the school's financial difficulties. Some of the real estate sold to clear part of the indebtedness had to be repossessed by the school, and \$30,000 was supplied by the Church to be applied on its debts. President A. O. Smoot underwrote large notes of the school to keep it operating. On his death, the trustee-in-trust of the



*The Joseph Smith Build*

Church, in the interest of the heirs of the estate, agreed to underwrite all notes of the Academy bearing President Smoot's endorsement.

President Cluff was instrumental in founding an alumni association in June of 1893. He gave encouragement to student organization and activity. Early in his administration two school papers were begun; athletic sports such as football, basketball, and track were encouraged; and the school colors, blue and white, were chosen. He established the first summer school and added new departments and laboratories.

In 1894 the title of the head of Brigham Young Academy was changed from "Principal" to "President," and, in 1903, the school became Brigham Young University.

In 1900 President Cluff sponsored a South American expedition to engage in archaeological study of Book of Mormon sites. While he was in South America, Acting President George H. Brimhall asked the authorities for a Church Normal Training School building with a gymnasium on the upper floor. Jesse Knight, a member of the Board of Trustees, volunteered a contribution of \$15,000. The board promptly authorized the project. Other contributions were solicited with good results. The total cost of the Training School and Gymnasium Building was \$35,000. The dedication service was held February 17, 1902.

**Administration of George H. Brimhall.** On April 16, 1904, after having acted as President of the University while Benjamin Cluff was in South America, George H. Brimhall was appointed President of the Brigham Young University. Joseph B. Keeler was appointed his first counselor and Edwin S. Hinckley his second counselor.

Dr. Brimhall also was a former student of Dr. Karl G. Maeser. He was a dynamic speaker and a great moulder of character. He continually stressed the fact that the primary purpose of the school was to make better Latter-day Saints.

The Missionary and Preparatory Building, later known as the Art Building and now as B.Y. High, was dedicated October 26, 1904. It cost \$13,000, of which amount \$9,000 was apportioned to our stakes: Utah, Alpine, Nebo, and Wasatch.

In 1904, the students and faculty began negotiations for the purchase of seventeen acres of land known generally as Temple Hill. This land was purchased from Provo City about 1907 at a total cost of \$1,000 and was the beginning of the upper campus. A survey of the land purchased showed that about one and one-half acres at the point of the hill was not included in the deed given by Provo City. The students and faculty members of the school voluntarily raised an additional \$1,000 to pay for this land.

This purchase provided a place for the Maeser Memorial Building, the cornerstone of which was laid on Founder's Day, 1909. It was ready for occupancy the fall term of 1911. The structure and furnishings cost \$130,000; the Knight family contributed \$65,000, and other members of the alumni some \$50,000.

The remainder of the cost was met through the sale of Blue Bench Irrigation Company Bonds owned by the school.

The Women's Gymnasium was erected in 1913; the Mechanic Arts Building in 1919.

On December 21, 1914, the late Jesse Knight made an endowment to the University of one hundred thousand dollars in six per cent bonds. The interest payments on these bonds, together with the payments on bonds which have matured, have been placed at interest, and the cash credit of this account now represents approximately twice the amount of the original endowment.

During President Brimhall's administration graduate work was introduced and the first master's degrees were conferred. The school spirit was furthered by the organization of the students into a student body. Printing of the school yearbook, **The Banyan**, was begun, and a huge white "Y" was placed on the mountainside east of Provo.

Dr. Brimhall served until July 1, 1921, a period of 17 years.

**Administration of Franklin S. Harris.** Franklin S. Harris, a former student of the institution under President George H. Brim-

*A Chemistry Laboratory, Eyring Science Center*



hall, was selected to succeed his former President. Dr. Harris had received his Ph. D. degree from Cornell University in 1911 and had served as an instructor in the Juarez Academy and Cornell University, and as professor of agronomy for the Utah Experiment Station, director of the School of Agricultural Engineering and Mechanical Arts, and director of the Utah Experiment Station at the Utah State Agricultural College. He had a world-wide reputation as a scientist.

Dr. Harris became President July 1, 1921, and served until June 30, 1945, a period of 24 years, the longest term of any President. During his administration, academic gains of great significance were made. The University was organized into five colleges, Applied Sciences, Arts and Sciences, Commerce, Education, and Fine Arts; and the Division of Religion and the Extension Division were established. The Graduate School was formally organized and a dean of the Graduate School appointed. The Heber J. Grant Library was completed in 1925, the Y Stadium in 1929, and during the last ten years of his administration a building program was begun which has been accelerating ever since.

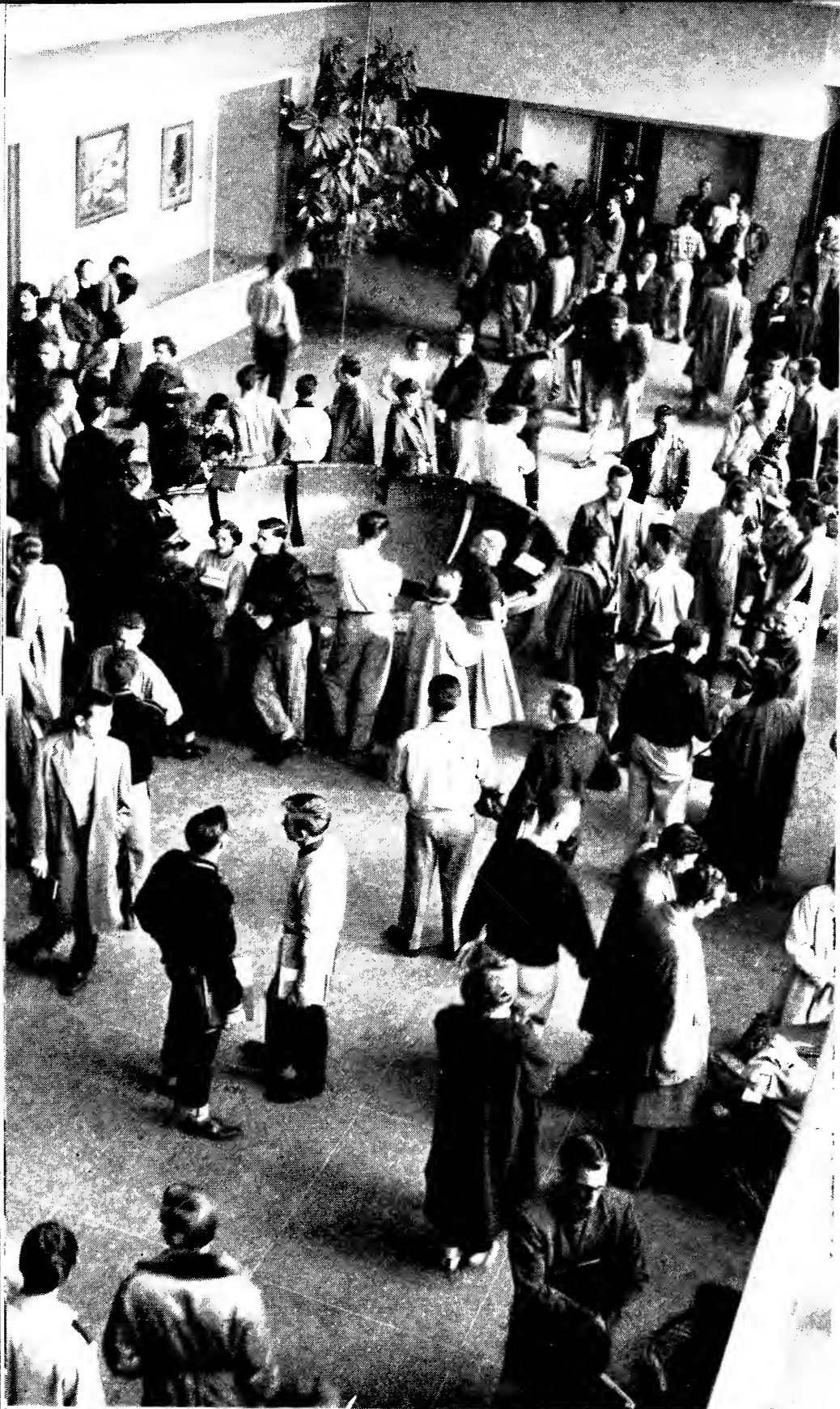
It was President Harris who first envisioned the present expanded upper campus of the University, and indeed who made it possible by his extensive purchasing of lands surrounding the original upper campus.

In 1935, two stories were added to the Mechanic Arts Building to provide additional classrooms and laboratories. The name was changed to George H. Brimhall Building. During the year 1935-36, a Stadium House on the west side of the football field was erected. In 1937-38, Allen Hall, a men's dormitory, and in 1938-39, Amanda Knight Hall, a women's dormitory, were constructed. These will accomodate 90 and 130 students, respectively. The construction of both buildings was financed by borrowing from the Knight Endowment Fund. The Joseph Smith Building was begun in 1939 and completed in 1941 as a project of the Church Welfare program. During 1943, the University acquired the National Youth Administration Building on the east part of the campus for use of the Mechanic Arts Department. In 1944, because of the acute housing problem created by the building of the Geneva Steel plant, it was equipped to serve as a temporary dormitory for women.

**Administration of Howard S. McDonald.** Howard S. McDonald, the next president of the University, served from July 1, 1945, to October 30, 1949. Before being appointed to this position he had served as Assistant Superintendent of Schools in San Francisco, and later as Superintendent of Salt Lake City Schools.

Under his leadership the school experienced a major expansion. From 1946 to 1948 the temporary women's dormitory at the southeast end of the upper campus was remodeled into what is now known as Social Hall, containing a large dance floor and classrooms and offices used by the Music Department. During the same period Knight-Mangum Hall, a four-level structure adjoining the Social Hall on the west, was constructed. This build-





*Lobby of the Eyring Science Center, a favorite meeting place*



ing provides housing and feeding accommodations for 280 women. Because of the enlarged, post-war student body, student housing facilities were greatly increased. In cooperation with the Federal Works program, temporary housing, known as Wymount Village, was constructed in 1946-47 near the eastern edge of the campus for 200 married veterans and 350 single veterans. Also under the Federal Works program of aid to education, temporary-type buildings were provided in 1946-47, consisting of the present Nursing Building, Student Health, the North Building, Industrial Arts, Wymount Dining Hall, and the University Press. In 1948 the Speech Department was moved to the Upper Campus and housed in temporary buildings. Here the Brigham Young University broadcasting station, KBYU, is located. A central heating plant, costing \$200,000, was constructed in 1946, consisting of two 250 HP boilers with space for two additional settings. An additional 500 HP boiler was added in 1949-50, and a large fourth unit will be installed during the summer of 1955.

It was under President McDonald's direction that the Eyring Science Center was begun and almost completed. Called by many educators the finest and most modern science building between the Mississippi and the Pacific Coast, it has four stories and contains approximately 150,000 square feet of floor space (practically the equivalent of the space in all of the other buildings of the University previously constructed). It is equipped with the finest facilities for study and research. Moreover, it is proof of the Church's sincere belief that there is nothing inconsistent between scientific truth and the teachings of the Gospel.

During his administration the planning and architectural drawings of buildings for the University were assigned to a University architect. The buildings and grounds were placed under the direction of a superintendent of buildings and grounds.

In the post-war era of expanding collegiate enrollments, the Brigham Young University, under his direction, expanded at a much faster rate than many other universities of the country. The faculty was increased to meet the new need. The Graduate School and the Student Counseling Service were both reorganized. As was true with his predecessors, he upheld and perpetuated the spiritual ideals of the University's academic life.

**Administration of Christen Jensen.** Dr. Christen Jensen acted as president of the Brigham Young University during 1939-40 (when Dr. Harris spent a year in Iran) and again from November 1, 1949, until the early part of 1951. His two periods of administration were characterized by an emphasis on scholarship and a meticulous observance of proper University standards. In an era of dynamic university problems, President Jensen directed an administration characterized by academic and administrative stability and sound judgment. Under his direction the Eyring Science Center was completed and dedicated on October 23, 1950; the plans for the new George Albert Smith Fieldhouse were approved, a drive for funds conducted, and its construction practically completed at a cost of over \$1,000,000. It provides, in addition to athletic and physical education facilities, offices for faculty members in the College of Recreation, Physical and Health Education,

and Athletics. The building accommodates more than 11,000 persons, which makes it the largest auditorium in the intermountain west. It was during his administration that all members of the Quorum of Twelve became members of the Board of Trustees.

**Administration of Ernest L. Wilkinson.** In 1950 Dr. Wilkinson was selected by the Board of Trustees as the new president. He began his period of service in February, 1951.

After graduating from Brigham Young University, he was graduated from George Washington University Law School, where he received his LL.B. degree. He then attended Harvard Law School, where he obtained the degree of Doctor of Juridical Science. After graduation he accepted an appointment to teach at the New Jersey Law School as Professor of Law. Soon thereafter he was invited to become an associate in the New York City law firm of which the Hon. Charles Evans Hughes, later Chief Justice of the Supreme Court of the United States, was the senior member. Later, organizing his own firm in Washington, D.C., Dr. Wilkinson achieved a national reputation as a lawyer, climaxed by obtaining judgments of \$32,000,000 for the Ute Indians, the largest judgments ever entered in the United States Court of Claims against the United States.

### *Art Students Study Color Relationships*



As a churchman, he has served as a bishop in the New York Stake and as a member of the stake presidency in the Washington Stake, and he has represented the Church on the National Commission for Army and Navy Chaplains, which approves chaplains appointed to the armed forces of the United States.

During his four years of service the University has experienced a 54 per cent increase in enrollment. In 1953, the University became the largest church-related institution of higher education in the United States. The faculty has witnessed an even larger proportionate increase in numbers, and the five Colleges previously comprising the University have been increased to nine, as follows:

Colleges of Biological and Agricultural Sciences; College of Commerce; College of Education; College of Family Living; College of Fine Arts; College of Humanities and Social Sciences; School of Nursing; College of Physical and Engineering Sciences; and College of Recreation, Physical and Health Education, and Athletics.

In 1951, Reserve Officer Training Corps units in the Air Force were activated at the Brigham Young University. The officers of these units have been selected by the Secretary of Air, with the approval of the President of the University. These units are composed entirely of students regularly enrolled at the Brigham Young University, and the same standards of conduct and living are required of them as of other students at the University. In accordance with an agreement with the Federal government, a building was completed in October, 1952, which serves as a permanent indoor rifle range for the R.O.T.C.

During the administration of President Wilkinson, the following new buildings, costing a total of more than \$5,500,000, have been added to the facilities of the University:

The Herald R. Clark Student Service Center was begun in July, 1952 and was completed and made available for occupancy in March 1953. The financing of this building was primarily from income of the Student Supply over its years of operation. In the building are housed, in addition to the bookstore itself, the Extension and Audio-Visual Aids Divisions, the Student Body offices and organizations, student publications, and Student Services such as employment, housing, and a post office.

The largest single building project ever undertaken on the BYU campus was started July 1952 with the construction of 16 buildings making up what is known as Heritage Halls. These buildings, completely modern in every respect, can house 972 girls. Six girls live together in an apartment, preparing their own meals and doing their own housework. There are ten apartments to a building. Occupancy of the first of the buildings was begun in March 1953. The entire project was completed and fully occupied by the fall quarter of 1953.



*Carl F. Eyring Physical Science Center*

The Engineering Building, constructed in 1953, has four wings which provide laboratory space for Civil, Mechanical, Electrical, and Chemical Engineering departments, and a central portion which is being used temporarily as offices for the Counseling Service and R.O.T.C.

In 1953 a motion picture building with sound stage and related facilities was constructed. This building is equipped with the most modern animation and motion picture sound equipment for the production of educational moving pictures used throughout the Church.

The David O. McKay Building, a classroom building containing 104 offices and 31 classrooms and laboratories, was begun in March 1954. It was completed and ready for occupancy in December of the same year. Currently housed in this building are the College of Education, and the Departments of English, Modern Languages, History and Political Science, Psychology, and sections of the Department of Religion.

A botanical laboratory building and a student health center, now under construction, will be ready for use at the beginning of the fall quarter.

In addition, the Board of Trustees has authorized many campus improvements and the construction of several buildings, at a total estimated cost of \$8,500,000. During 1955, construction will begin on these projects: a) sixteen more units similar to units of Heritage Halls, but containing twelve rather than ten apartments each; b) four men's dormitories housing 200 men in each unit, all inter-connected with a central administration building which will house a snack bar, dining facilities, and offices; c) the building to house the College of Family Living and related departments, designed in a style similar to that of the McKay Building, but fifty percent larger.

Plans are being drawn for several other major buildings which will be built in the next few years.

## The University Today

**Unification Plan.** In every era of the Church its leadership has been sensitive to the need of continued intellectual and spiritual growth for its members. To meet this need, Church educational policies have constantly been adapted or modified to serve more fully the youth of the Church.

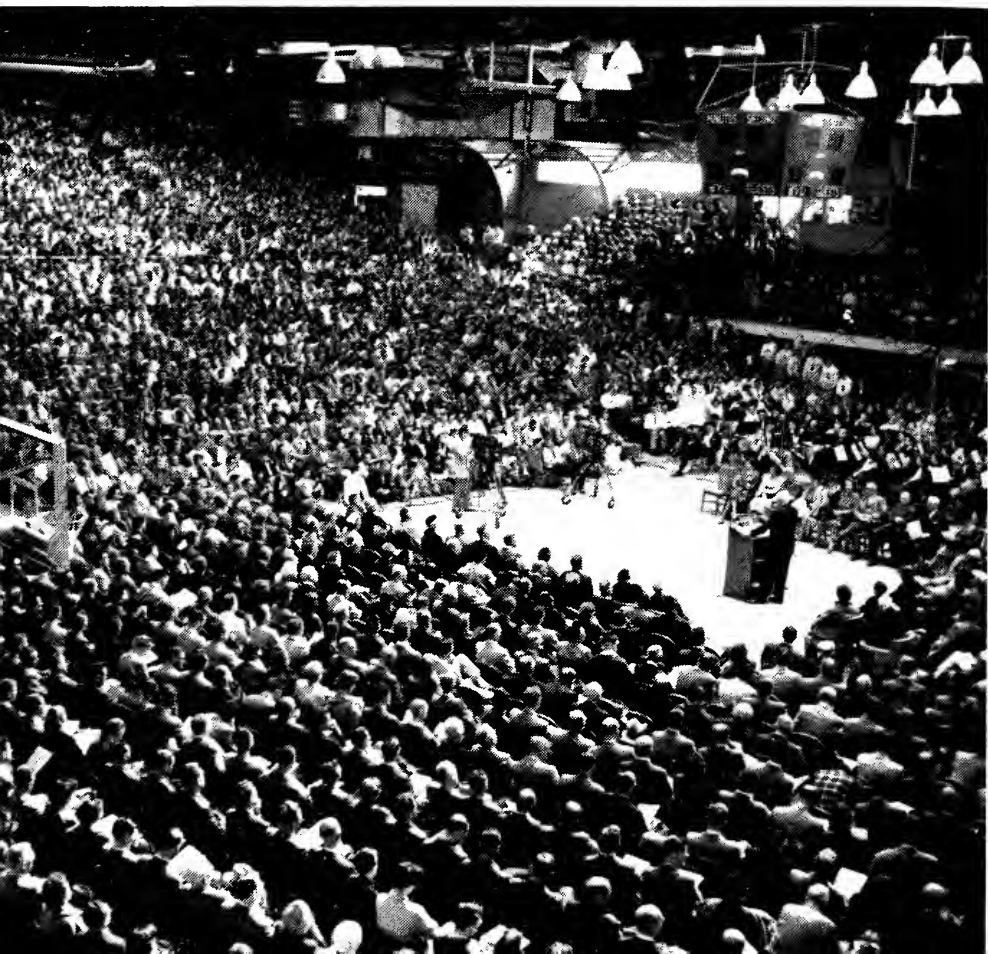
It was in such a spirit that all Church educational institutions were combined in July 1953 under one Administrator, Ernest L. Wilkinson, who in turn is subject to a Board of Trustees for Brigham Young University, and a Board of Education for the rest of the Church School System. Both Boards, however, consist of the First Presidency and the Council of the Twelve. In announcing this unified plan the First Presidency said: "This great system of schools, institutes, and seminaries can become an ever-more effective instrumentality in equipping the youth of the

Church with solid foundations to meet the challenge of modern living." It added that Dr. Wilkinson "has surrounded himself with strong men to do a big job," and that "he will have at his service the strength not only of these men, but of all the members of the Brigham Young University Faculty."

Since the approval of this plan during the summer of 1953 the administrative offices of Church education have been established at Brigham Young University. Thus Brigham Young University becomes the Mother Institution for Latter-day Saint education. From this campus a spirit of simplifying efficiency, economy, uniformity of standards and procedures, and even wider cooperation and harmony can now weld all phases of Church educational work into a stronger unit than ever before.

Ernest L. Wilkinson, Administrator of the Unification Plan, continues as President of Brigham Young University. Assisting

*President David O. McKay addressing the Studentbody*





him are three Vice Presidents: Harvey L. Taylor, executive assistant; William E. Berrett, in charge of religious education; and William F. Edwards, in charge of finance and business administration.

Under this new plan, established schools, seminaries, institutes, and colleges continue their functions. Changes will be brought about as need and the growth of the Church dictate. In addition, each institution shares its particular problems and philosophies with its sister institutions, as coordinated and interpreted by the Administrator and his assistants.

**Academic Growth and Recognition.** The Brigham Young Academy as originally organized by Karl G. Maeser had three departments, the Academic, the Intermediate, and the Primary. Instruction was given mostly in the work of the lower grades, although a normal class was included in the Academic department. Today the University offers a full university curriculum, and its credits are recognized and accepted to the same extent as those of other leading American colleges. The Brigham Young University is on the approved list of the following educational organizations and associations.

- Association of American Universities
- Northwest Association of Secondary and Higher Schools
- American Council on Education
- Association of American Colleges
- American Association of University Women
- National University Extension Association
- American Association for Adult Education
- American Chemical Society
- The National Commission on Accrediting
- The American School of Oriental Research
- American Association of Colleges for Teacher Education

**Growth of Student Body.** When founded in 1875, Brigham Young Academy gave elementary and high school work only. Over the eighty years of its existence it has become in terms of full-time equivalent students the largest university in Utah. At the present time it is experiencing a rapid growth, which, if continued, will soon make it one of the large institutions of the West.

At the time of its organization in 1875, nearly all of the students came from Utah County and its environs. Its student enrollment began at 29. During 1954-55, it had on the campus 8463 resident students and also gave instruction to 2524 students in the Extension Division, and 555 in the Brigham Young High School and Training School, a total of 11,542 students for the year.

The students registered during the last few years came from the forty-eight states of the Union, the District of Columbia, the territories of Hawaii and Alaska, and from 22 foreign countries. Approximately 52 per cent of the students are from outside the state of Utah, and this percentage is increasing each year.



*Testing Butterfat Content in an Animal Husbandry Class*

Three branches of the Church officered by the students have been organized for those students who reside on the campus. Two of these branches are made up of unmarried students and the other of married students. The tithing records of these three branches indicate that nearly 85 per cent of the students who have independent incomes have made voluntary tithing contributions, most of them having paid a full tithing. Of the overall enrollment of more than 9000 resident students, approximately 1500 were returned missionaries during the school year 1953-54.

As in the days of Dr. Maeser, industry and thrift are encouraged, and at the present time approximately 25 per cent of all students are employed, earning a part or all of their subsistence.

Membership in the Church of Jesus Christ of Latter-day Saints is not required for admission, although at the present time 97 per cent of the students are members of the Church. The other three percent, as a condition of their continuance as members of the student body, are required to live the same standards as other students, which include graciousness in personal behavior, conformance to Christian ideals in everyday living, a high standard of morality, and abstinence from the use of alcohol and tobacco.



## SCIENCE AND ART COLLECTIONS

**The Archaeological Collection** consists of materials for study and research in the early history of man. Original antiquities on display, illustrating the early history of man in the Old World, range from crude stone "hand axes" of the Old Stone Age to inscribed tablets and other advanced products of the ancient biblical civilizations of the Near East; while those illustrating the early history of man in the New World include representative artifacts of the early Indian cultures of Utah and the Southwest, and antiquities of the ancient pre-Columbian civilizations of Mexico, Central and South America. Supplementing this exhibit are replicas of such famous archaeological monuments as the Rosetta Stone, key to the deciphering of the Egyptian hieroglyphics, and the "Tablet of the Cross" from the ancient Maya city of Palenque in Central America.

Also in the archaeological museum is a research archive of several thousand photographs and field card records of antiquities excavated or examined by archaeological expeditions of the University and other institutions.

**The Botanical Collection** includes a herbarium of liverworts, mosses, and vascular plants; and also an extensive series of preserved algae, fungi, liverworts, mosses, ferns, and seed plants. There is also included a series of plants which illustrate various plant diseases.

The herbarium is made up principally of plants collected throughout the Western States, but many species from other regions are included. The collection of North American plants includes 170 families, 1,000 genera, and 3,500 species, represented by about 20,000 herbarium sheets. There is also a collection of plants from Siberia, obtained by President F. S. Harris in 1929, as well as a small group of plants from Europe and from South America.

**The Fine Arts Collection** of paintings, sculpture, drawings, etchings, engravings, monotypes, lithographs, and reproductions of works of art are as follows:

### I. Memorial Collections.

1. The Lee Greene Richards Collection of 36 paintings.
2. The James T. Harwood Collection of 90 paintings, etchings, and drawings.
3. The John Hafen Collection of 24 paintings.
4. The Elbert H. Eastmond Collection of 64 paintings.
5. The John Willard Clawson Collection of 85 paintings and sketches.
6. The Maynard Dixon Collection of 85 paintings and sketches.

PHYSICAL ENGINEERING SCIENCES

DEPARTMENTS  
MATHEMATICS  
PHYSICS ASTRONOMY  
CHEMISTRY  
ENGINEERING SCIENCE  
AIR SCIENCE  
GEOLOGY  
GEOGRAPHY

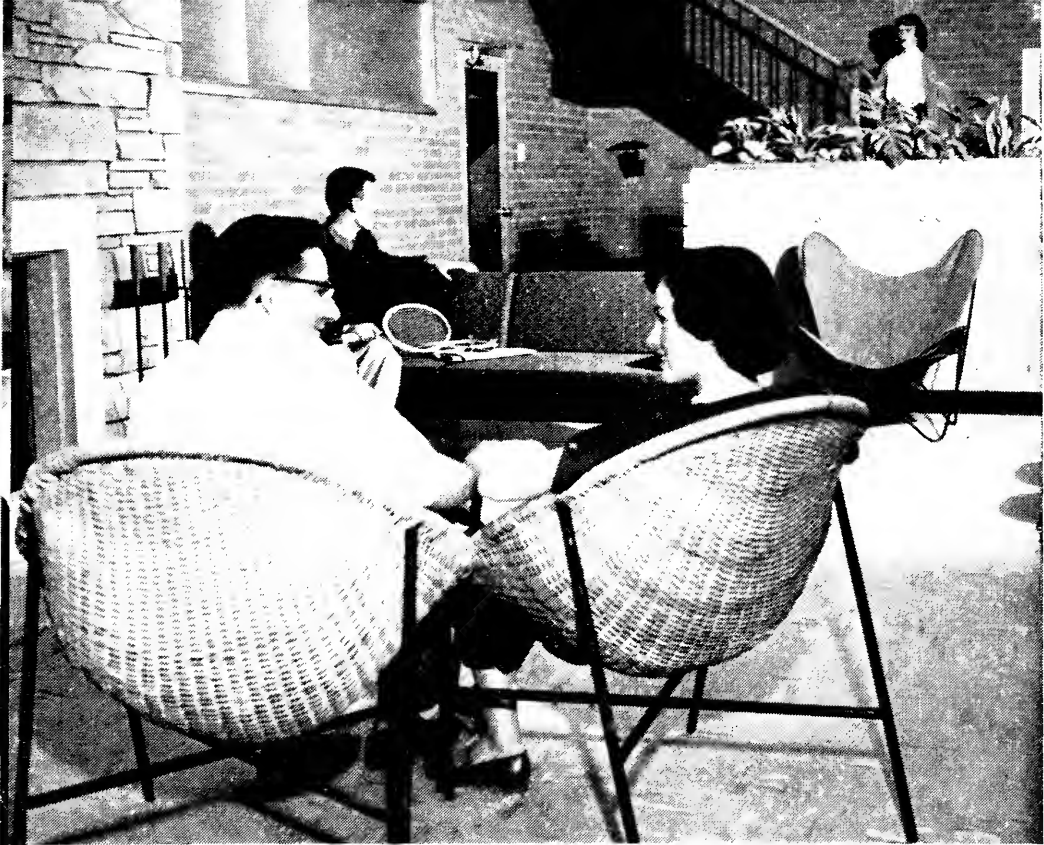
College of  
Physical and  
Engineering  
Sciences

Registration Day

7. The Edwin Evans Collection of 61 paintings.
  8. The Rose Hartwell Collection of 71 paintings.
  9. The Rose Hartwell Crafts Collection.
  10. The Joseph Imhof Collection of lithographs.
- II. There are many other Utah artists represented in the Brigham Young University Fine Arts Collection, including George M. Ottinger, Daniel Weggeland, John Hafen, Loris Pratt, John B. Fairbanks, Samuel Jepperson, Minerva Teichert, Alma Wright, Waldo Midgley, Calvin Fletcher, Cornelius Salisbury, Joseph Everett, Henri Moser, Torlief Knaphus, Avard Fairbanks, Henry Rasmussen, B. F. Larsen, Edgar M. Jensen, Glen H. Turner, J. Roman Andrus.
- III. Well-known national artists represented in the collection include Lee Randolph, George Elmer Browne, Fern Gary, Gordon Grant, Marie A. Hull, Haley Lever, Clarence Millet, Luis F. Mora, Chauncey F. Ryder, Matteo Sandona, W. Lester Stevens, Anthony Thieme, John Law Walker, J. Alden Weir, John Whorf, Eliot Daingerfield, George Pierce Ennis, John E. Costigan, George Henry Taggart, William Morris, Jon Corbino, J. Connaway, Robert Brackman, Peter Hurd, Marguerite Pearson, Henry W. Ranger, John Twachtman, John F. Carlson, Gene Kloss, Earle Loran, Emil Bistran, Umberto Romano, and Lez Haas.
- IV. Original etchings, lithographs, prints, including the work of Ernest Fiene, Rockwell Kent, Joe Jones, Reginald Marsh, Waldo Pierce, Herbert Dunton, Boardman Robinson, Otis Dozier, Lawrence Barrett, John Taylor Arms, Kaethe Kollwitz, Gene Kloss, Conrad Buff, and Reynold W. Weidenaar; there are also 24 Rembrandt replicas.
- V. Oriental art, including Japanese paintings, prints, and reproductions.
- VI. Reproductions of famous works of art, including various types of modern art.
- VII. Large collections of slides, including natural color slides and the George K. Lewis memorial collection of kodachrome slides.

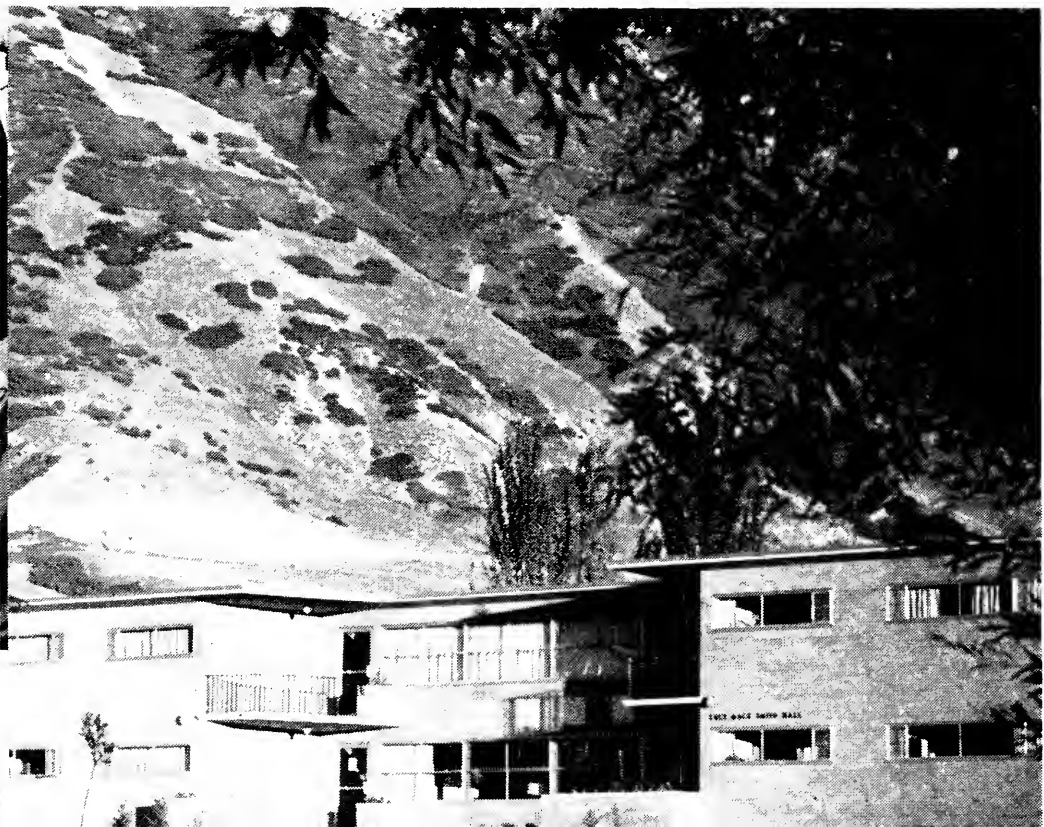
**The Geological Collections** of the University consist of an unusually complete series of minerals and an interesting variety of fossils.

The minerals number many thousands and are representative of the great western mining districts together with hundreds of localities of note. Part of this collection once represented the nucleus of the famous Deseret Museum Collection of Salt Lake City.



*Reception Room in one of the Heritage Halls*

*Lucy Mack Smith Hall, one of the Heritage Halls,  
with Wymount in the background*



The fossil series are representative of many states and typical world localities. Much of this material was also formerly a part of the Deseret Museum Collection. The vertebrate collection is especially rich in original fossils and casts of the characteristic mammalian fauna that lived in the western states during the immediate geologic past.

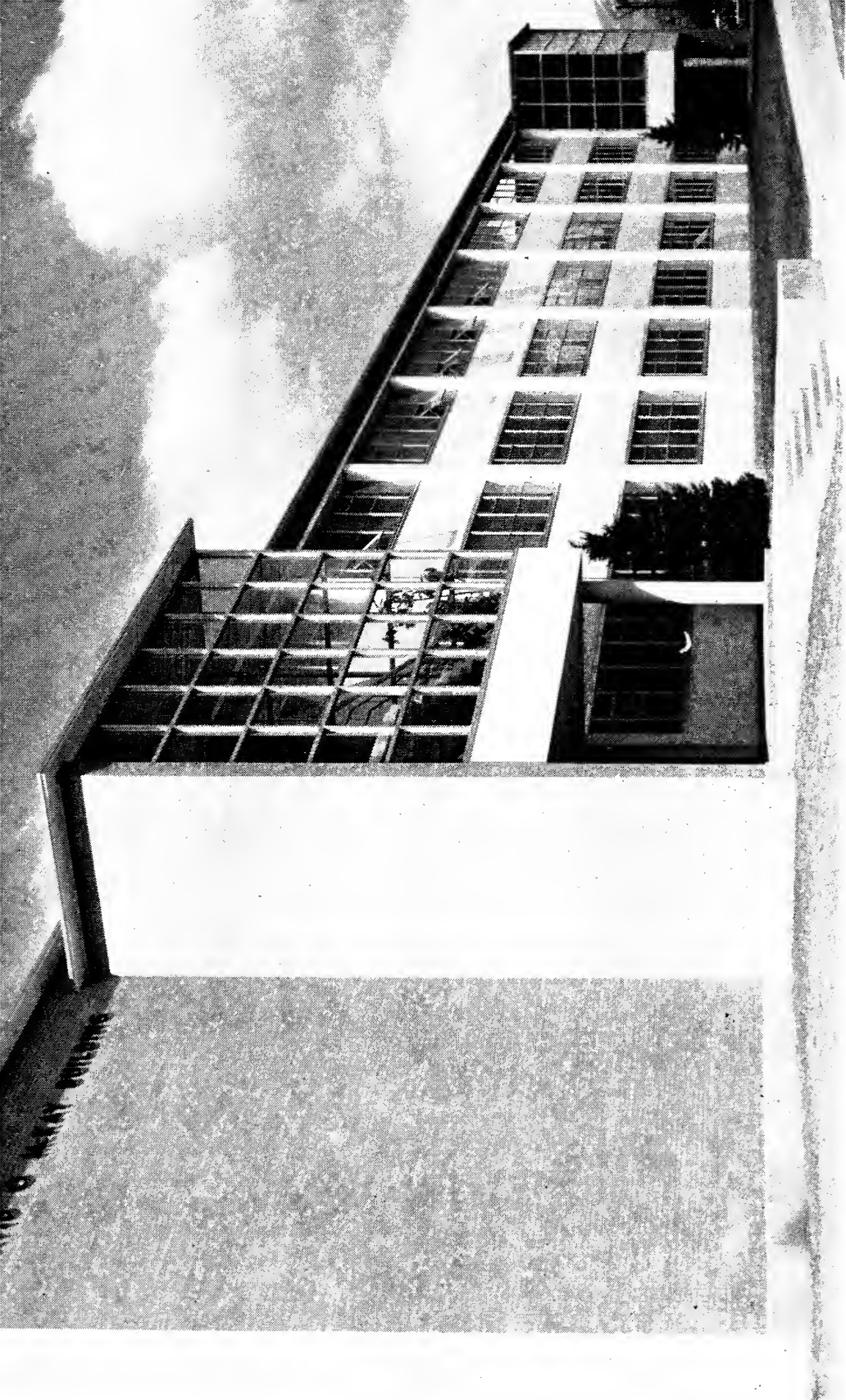
**The Zoological and Entomological Collections** of the University consist of a large series of identified vertebrate and invertebrate species of Utah and contiguous states. A complete series of fish, amphibians, reptiles, birds, and mammals of this region are to be found in the collection. The fish collection is especially rich in species and specimens from the intermountain region. The bird collection consists of about 4,500 skins, 1,000 of which were collected in the Magdalena River Valley of South America by Chester Van Buren in 1901-03.

The Entomological collections consist of 270,000 specimens. The Tom Spaulding Collection of Utah Lepidoptera, the Chester Van Buren Collection of South American Butterflies, the Charles W. Long Weevil Collection, the Charles Schaeffer Weevil Collection, and many species of weevils from the Blatchley Collection form important portions of this collection.

The natural history collections consist of a complete collection of Utah fish, amphibians, reptiles, birds and mammals. This collection is also supplemented by the Chester Van Buren collection of birds of the Magdalena River of Columbia, the David Starr Jordan collection of fish from the Hawaiian Islands, and a collection of reptiles from Oceania and the Philippine Islands. The entomological collection contains authoritatively named specimens in all the orders of insects. The pinned insects are placed in 450 trays, 18x19 inches in size, 2 inches deep. The specimens are pinned in unit boxes. The Lepidoptera collection is fairly complete, containing specimens from Utah and the Great Basin region. It contains over 600 named species and 10,000 specimens. It is made up of the famous Tom Spaulding collection and the Chester Van Buren collections. The Coleoptera collection contains over 6000 determined species and 50,000 specimens. It contains a fairly complete collection of weevils, the Charles W. Long collection of 1676 species, 300 species from the Blatchley collection, and the Charles Schaeffer weevil collection consisting of 813 species. A large collection of insects was made by staff members and former students in the South Pacific Islands, 1942-45. Many types, cotypes, and paratypes of specimens are in the collections. All these collections are housed in the fireproof George H. Brimhall Building.

These collections are being added to annually by means of collection expeditions that are sent out to various parts of the western United States. During 1944-45, 1,000 specimens of reptiles and 25,000 specimens of insects were received from staff members and former students who were on duty in the South Pacific.





*David O. McKay Building*

## CAMPUS LIBRARIES

The main library is housed in the Heber J. Grant Library building. It consists of over 225,000 books, pamphlets, government documents, and bound magazines. The Reference Room on the first floor is the information center for the library. It contains general reference books on all subjects and over seven hundred current periodicals. The loan desk, the card catalog, the main reading room, and the library offices are on the second floor. Microfilm and microcard facilities make it possible to provide students and faculty with many materials not otherwise obtainable. B.Y.U. Library is a U.S. Government depository and receives numerous government documents as well as many state and professional publications.

The general library facilities are available to students, faculty, alumni and other interested persons. Regularly enrolled students present their activity cards to borrow books. Others may obtain a permit from the Circulation Librarian.

**Study Facilities.** Well-lighted study rooms are available in several places on the campus. These include three reading rooms in the main library, two in the science library, one in the McKay Building, and one in the high school library on the lower campus.

**Special Libraries.** The Science Library is on the main floor of the Physical Science building. Books and major periodicals in the following subject fields are in this library: physical science, radio, engineering, photography, and antiquities. In addition to the main reading room, the Science Library consists of a seminar room and a map room.

The Phonograph Record Library is in Room 218, Education Building. This is available to all students of the University as a place to enjoy the best in music.

The rare book division of the library houses materials which are not available for general circulation. Such materials include the Utah and Mormon Collections and the National Welsh Library of America.

In Room 160 of the Student Service Center, the Journalism Department maintains a reference room containing current copies of leading daily newspapers and newsmagazines of the United States and daily and weekly newspapers of the intermountain region. The room also houses an extensive collection of books and periodicals in the field of journalism.

1955

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31	.....	.....	.....	.....	26	27	28	29	30	.....	.....
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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3	4	5	6	7	8	9	7	8	9	10	11	12	13	4	5	6	7	8	9	10
10	11	12	13	14	15	16	14	15	16	17	18	19	20	11	12	13	14	15	16	17
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31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
.....	.....	.....	.....	.....	1	.....	.....	.....	1	2	3	4	5	.....	.....	.....	1	2	3	.....
2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
23	24	25	26	27	28	29	27	28	29	30	.....	.....	.....	25	26	27	28	29	30	31
30	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

1956

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	.....	.....	1	2	3	4	.....	.....	.....	1	2	3	.....	.....
8	9	10	11	12	13	14	5	6	7	8	9	10	11	4	5	6	7	8	9	10
15	16	17	18	19	20	21	12	13	14	15	16	17	18	11	12	13	14	15	16	17
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29	30	31	.....	.....	.....	.....	26	27	28	29	.....	.....	.....	25	26	27	28	29	30	31
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	.....	.....	1	2	3	4	5	.....	.....	.....	.....	.....	1	2
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29	30	.....	.....	.....	.....	.....	27	28	29	30	31	.....	.....	24	25	26	27	28	29	30
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	.....	.....	1	2	3	4	.....	.....	.....	.....	.....	.....	1	.....
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31	.....	.....	.....	.....	26	27	28	29	30	31	.....	23	24	25	26	27	28	29
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# University Calendar

1955-56

## Autumn Quarter

**September 19, 20, 21 (Monday, Tuesday, Wednesday):** Faculty Workshop and First Regular Faculty Meeting.

**September 22, 23, 24 (Thursday, Friday, Saturday), 8:00 a.m.** Orientation and placement tests for all freshmen and sophomores who will register at B.Y.U. for the first time. Late fees will be charged all new students who fail to appear for orientation and placement tests at 8:00 a.m. Thursday.

**September 26, 27 (Monday, Tuesday), 8:00 a.m.:** Registration for all regular and special students. Students will register in an alphabetical order to be announced. A late fee will be charged all students registering after this date.

**September 28 (Wednesday):** Class instruction begins.

**October 3 (Monday):** Students who register later than October 3 will have their transcripts of credit re-examined by the University to aid in determining the number of credit hours for which they will be permitted to register.

**October 10 (Monday):** Last day for currently enrolled students to enter new classes.

**November 4 (Friday):** Last day on which currently enrolled students may drop classes without receiving a passing or failing grade.

**November 5 (Saturday):** Homecoming.

**November 18 (Friday):** Students withdrawing from school after this date must be doing passing work in each class if they are to be discontinued without academic failure.

**November 24, 25 (Thursday, Friday):** Thanksgiving recess.

**December 13, 14, 15 (Wednesday, Thursday, Friday):** Examination period.

**December 16 (Friday):** Autumn Quarter closes.

## Winter Quarter

**January 3 (Tuesday):** Registration for all students. A late fee will be charged all students registering after this date.

**January 4 (Wednesday):** Class instruction begins.

**January 9 (Monday):** Students who register later than January 9 will have their transcripts of credit re-examined by the University to aid in determining the number of credit hours for which they will be permitted to register.

**January 13 (Friday):** Last day for currently enrolled students to enter new classes.

**February 10 (Friday):** Last day on which currently enrolled students may drop classes without a passing or a failing grade.

**February 24 (Friday):** Students withdrawing from school after this date must be doing passing work in each class if they are to be discontinued without academic failure.

**March 14, 15, 16 (Wednesday, Thursday, Friday):** Examination period.

**March 16 (Friday):** Winter Quarter closes.

## Spring Quarter

**March 20 (Tuesday):** Registration for all students. A late fee will be charged all students registering after this date.

**March 21 (Wednesday):** Class instruction begins.

**March 26 (Monday):** Students who register later than March 26 will have their transcripts of credit re-examined by the University to aid in determining the number of credit hours for which they will be permitted to register.

**March 30 (Friday):** Last day for currently enrolled students to enter new classes.

**April 27 (Friday):** Last day on which currently enrolled students may drop classes without a passing or a failing grade.

**May 7 (Monday):** Students desiring to enter the summer session who have not previously attended B.Y.U. should submit their application for admission on or before May 7.

**May 11 (Friday):** Students withdrawing from school after this date must be doing passing work in each class if they are to be discontinued without academic failure.

**May 26 (Saturday):** Senior Day.

**May 31 (Thursday):** Baccalaureate Services.

**May 29, 30, 31 (Tuesday, Wednesday, Thursday):** Examination period.

**June 1 (Friday):** Alumni Day.

**June 1 (Friday evening):** Eighty-First Commencement Exercises.

## Summer Quarter

**June 12 (Monday):** Registration for the Summer Quarter.

All undergraduate colleges and the Graduate School offer a full quarter of work in the summer.

The summer quarter is divided into terms so that in special cases students may be in attendance only part of the summer, if they desire, without hindrance to the completion of their courses. Both regular terms of the summer quarter are held on the Provo campus.

The summer quarter provides the opportunity for persons who are employed during the usual nine months of schooling to pursue graduate work. It provides regular students the opportunity to complete requirements for graduation in a shorter time than four years. All facilities of the University are available during the summer quarter.

**June 18, 19, 20, 21, 22 (Monday, Tuesday, Wednesday, Thursday, Friday):** 1956 Leadership Week.

## Registration For Evening Classes

(See "Extension Division" in this catalog.)

Registration will be held in the Extension Division located in the Herald R. Clark Student Service Center for four days at the beginning of each quarter, as follows:

### AUTUMN QUARTER

September 22 and 23	Thursday and Friday	8:00 a.m.-5:00 p.m.
September 26 and 27	Monday and Tuesday	8:00 a.m.-9:00 p.m.
September 28	Wednesday for LATE REGISTRATION	8:00 a.m.-9:00-p.m.

### WINTER QUARTER

December 29 and 30	Thursday and Friday	8:00 a.m.-5:00 p.m.
January 3 and 4	Tuesday & Wednesday	8:00 a.m.-9:00 p.m.
January 5	Thursday for LATE REGISTRATION	8:00 a.m.-9:00 p.m.

### SPRING QUARTER

March 15 and 16	Thursday and Friday	8:00 a.m.-5:00 p.m.
March 19 and 20	Monday and Tuesday	8:00 a.m.-9:00 p.m.
March 21	Wednesday for LATE REGISTRATION	8:00 a.m.-9:00 p.m.

### SUMMER QUARTER

**June 6, 7, 8, 11 (Wednesday, Thursday, Friday, Monday), 8:00 a.m. to 5:00 p.m., and June 11 (Monday), 5:00 p.m. to 9:00 p.m.:** Registration in the Extension Center.

# Administration and Faculty

## General Administrative Officers

Board of Education of the Church of Jesus Christ  
of Latter-day Saints  
and Board of Trustees of Brigham Young University

DAVID O. McKAY ..... President  
STEPHEN L RICHARDS ..... First Vice-President  
J. REUBEN CLARK, JR. .... Second Vice-President  
JOSEPH FIELDING SMITH  
HAROLD B. LEE  
SPENCER W. KIMBALL  
EZRA TAFT BENSON  
MARK E. PETERSEN  
HENRY D. MOYLE  
DELBERT LEON STAPLEY  
MARION G. ROMNEY  
LeGRAND RICHARDS  
ADAM S. BENNION  
RICHARD L. EVANS  
GEORGE Q. MORRIS

Executive Committees of Church Board of Education and  
Brigham Young University Board of Trustees

JOSEPH FIELDING SMITH  
HAROLD B. LEE  
HENRY D. MOYLE  
MARION G. ROMNEY  
ADAM S. BENNION  
ERNEST L. WILKINSON

## Administrative Officers

ERNEST L. WILKINSON, Administrator of Board of Education and  
President of Brigham Young University  
HARVEY L. TAYLOR, Executive Assistant to the President  
WILLIAM E. BERRETT, Vice-President in Charge of Religious  
Education  
WILLIAM F. EDWARDS, Vice-President in Charge of Finance and  
Business Administration  
CLYDE D. SANDGREN, Secretary of Board of Trustees, Board of  
Education, and Executive Committees; and  
General Counsel and Secretary for Church School System

## University General Administrative Officers

President .....	Ernest L. Wilkinson
Executive Assistant to the President .....	Harvey L. Taylor
Vice-President in Charge of Finance and Business Administration .....	William F. Edwards
Treasurer .....	Kiefer B. Sauls
General Accounting .....	Harold Western
Cashier's Department .....	C. Joseph Rowberry
Machine Accounting .....	Rulon Brough, Manager
Ticket Bureau .....	Floyd R. Taylor, Director
Auxiliary Services .....	Ben E. Lewis, Director
Farm Management, Creamery, Laundry, Food Buying .....	James B. Hill, Manager
Food Service .....	Wells Cloward, Manager
Photo Studio .....	Joseph M. Boel, Manager
Purchasing, Mail Service, Post Office, Receiving .....	C. R. Peterson, Purchasing Agent
Student Housing .....	Fred A. Schwendiman, Director
University Press .....	Franklin R. Haymore, Manager
Motion Picture Production .....	Wetzel O. Whitaker, Director
Physical Plant .....	Leland M. Perry, Superintendent
Maintenance of Buildings and Facilities .....	Robert B. Hellewell Assistant Superintendent
Heating .....	Karl A. Miller, Assistant Superintendent
Placement Bureau .....	B. Keith Duffin, Director
Vice-President in Charge of Religious Education .....	William E. Berrett
General Counsel and Secretary .....	Clyde D. Sandgren
Dean of Students .....	Wesley P. Lloyd
Admissions Officer .....	Orrin H. Jackson
Advisor to Foreign Students .....	Selby G. Clark, Chairman
Acting Registrar .....	Lucile Spencer
Scholarships, Awards, and Financial Aids .....	Selby G. Clark, Chairman
Coordinator of Student Organizations .....	Henry L. Isaksen
Counseling Service .....	Howard T. Reid, Chairman
Counselor for Women .....	Lillian C. Booth
Director of Program and Personnel, Women's Housing .....	Cleo McCracken
Traffic and Security .....	Leonard E. Christensen, Capt.

## Colleges, Schools, Divisions, and Research

Biological and Agricultural Sciences, College of	Raymond B. Farnsworth, Acting Dean
Commerce, College of	William F. Edwards, Dean
Education, College of	Asahel D. Woodruff, Dean
Family Living, College of	Marion C. Pfund, Co-Dean
Fine Arts, College of	Gerrit de Jong, Jr., Dean
Humanities and Social Sciences, College of	Antone K. Romney, Acting Dean
Physical and Engineering Sciences, College of	Harvey Fletcher, Dean
Recreating, Health and Physical Education, and Athletics, College of	Jay B. Nash, Acting Dean
Graduate School	George H. Hansen, Dean
Nursing, School of	L. Bernice Chapman, Director
Summer School	Howard T. Reid, Acting Director
Research Division	Harvey Fletcher, Director
Division of Religion	
Graduate Studies	Sidney B. Sperry, Director
Undergraduate Division	B. West Belnap, Director
Extension Division	Harold Glen Clark, Director
	Lynn M. Hilton, Assistant Director
Adult Education Services	Lynn M. Hilton, Chairman
Audio-Visual Aids	Clarence Tyndall, Chairman
Home Study Bureau	Lula Clegg, Supervisor
Travel Studies Bureau	Max Rogers, Supervisor

## Service Units

Booking University Attractions	Floyd R. Taylor, Chairman
Coordinating and Scheduling of Extracurricular Events	Wesley P. Lloyd
Devotional Assemblies	Stewart L. Grow, Chairman
Libraries	S. Lyman Tyler, Director
Librarian	Naoma Rich
Lyceums and Musicals	Herald R. Clark, Chairman
Press Relations	Edwin Butterworth, Director
Public Relations and Publications	Dean A. Peterson, Director
Public Services	W. Cleon Skousen, Director
Radio and Television Programs	Harold I. Hansen, Chairman
Student Health Service	Ariel L. Williams, M.D. University Physician
Student Supply	Herald R. Clark, Chairman of the Board H. Neil McKnight, Manager

## Departments of Instruction

Accounting .....	Joseph T. Bentley,	Chairman
Agricultural Economics .....	A. Smith Pond,	Chairman
Agronomy .....	Merrill J. Hallam,	Chairman
Air Science .....		
Animal Husbandry .....	Lawrence Morris,	Chairman
Archaeology .....	M. Wells Jakeman,	Chairman
Art .....	J. Roman Andrus,	Chairman
Bacteriology .....	Don H. Larsen,	Chairman
Bible and Modern Scripture .....	Roy W. Doxey,	Chairman
Botany .....	Bertrand F. Harrison,	Chairman
Business Management .....	Richard L. Smith,	Chairman
Chemistry .....	H. Smith Broadbent,	Chairman
Church History .....	Russell Rich,	Chairman
Clothing and Textiles .....	Eleanor Jorgensen,	Chairman
Economics .....	A. Smith Pond,	Chairman
Economics and Management of the Home .....	Marion C. Pfund,	Chairman
Educational Administration ....	Owen L. Barnett, Acting	Chairman
Educational Instruction .....	Arthur Browne,	Chairman
Educational Research and Services ....	Robert L. Egbert,	Chairman
Educational Values and Programs .....		
Education: Secondary Laboratory Schools .....	Morris A. Shirts,	Principal
Education: Elementary Laboratory Schools .....		
Engineering Sciences .....	Jens J. Jonsson,	Chairman
English .....	Leonard Rice,	Chairman
Finance and Banking .....	Herald R. Clark,	Chairman
Food and Nutrition .....	Marion Bennion,	Chairman
Geography .....	Elliott Tuttle,	Chairman
Geology .....	Harold J. Bissell,	Chairman
Health Education and Safety .....	Clarence Robison,	Chairman
History .....	Richard D. Poll,	Chairman
Homemaking Education .....	Marion C. Pfund,	Chairman
Horticulture and Landscape Architecture ....	Clarence D. Ashton,	Chairman
Housing and Design .....	Marion C. Pfund,	Chairman
Human Development and Family Relationships .....	Marion C. Pfund,	Chairman
Industrial Arts and Drawing .....	Lavell Gammett,	Chairman
Intercollegiate Athletics and Intramural Athletics .....		
Journalism .....	Oliver R. Smith,	Chairman
L.D.S. Church Organization and Administration .....	Chauncey C. Riddle,	Chairman
Library Science .....	Naoma Rich,	Librarian
Marketing .....	Weldon J. Taylor,	Chairman
Mathematics .....	Milton Marshall,	Chairman
Modern and Classical Languages ....	Arthur R. Watkins,	Chairman
Music .....	John R. Halliday,	Chairman
Physical Education for Men .....	C. J. Hart,	Chairman
Physical Education for Women .....	Leona Holbrook,	Chairman
Physics .....	Wayne B. Hales,	Chairman
Political Science .....	Richard D. Poll,	Chairman
Psychology .....	Mark K. Allen,	Chairman

Recreation .....	
Scouting .....	
Secretarial Training .....	Lars G. Crandall, Chairman
Sociology .....	Reed Bradford, Chairman
Speech and Dramatic Arts .....	Harold I. Hansen, Chairman
Theology and Religious Philosophy .....	David H. Yarn, Chairman
Zoology and Entomology .....	Vasco M. Tanner, Chairman

### University Council

The University Council consists of the Presidency and all members of the faculty with the rank of professor, associate professor, or assistant professor. The University Council is the legislative body of the faculty. Subject to the powers reserved by the Board of Trustees and those exercised either by the President or the Deans' Council, the University Council determines policy and procedure affecting the University and its sub-divisions.

### Deans' Council

The Deans' Council consists of the Presidency, all deans, and the directors of schools and divisions.

### The Undergraduate Colleges

Each College in Brigham Young University is an undergraduate college which offers work for the bachelor's degree only. All work beyond the bachelor's degree, in every department, is under the Dean of the Graduate School.

### The General Committee of the Graduate School

The chief administrative body of the Graduate Faculty is the General Committee, which consists of three groups: (a) The President of the University and the Dean of the Graduate School, ex-officio; (b) Four members of the Graduate Faculty elected by the Graduate Faculty from the Graduate School at large for staggered terms of three years; and (c) Seven members of the Graduate Faculty, one elected for a term of three years from each of seven groups of departments by those members of the Graduate Faculty within such departments. Elections are held so as to stagger the terms of the seven members.

### The Extension Division Council

The Extension Division Council is an advisory body for the Extension Division of the University.



## The Faculty

### Emeriti

**William H. Boyle** ..... Professor Emeritus of Education  
B.A., M.A., Brigham Young University, 1913, 1923.

**Ella Larsen Brown** ..... Librarian Emeritus

**Gustave Buggert** ..... Assistant Professor Emeritus of Music

**Elsie C. Carroll** ..... Associate Professor Emeritus of English  
B.S., M.A., Brigham Young University, 1926, 1928.

**Benjamin F. Cummings** ..... Professor Emeritus of Modern  
and Classical Languages  
B.A., University of Utah, 1913.

**Norman Dunn** ..... Instructor Emeritus in English  
King's Scholar, M.R.S.T., Saltley College, Birmingham, England,  
1902-04, 1922.

**May C. Hammond** .... Assistant Professor Emeritus of Elementary  
Education  
B.S., M.S., Brigham Young University, 1934, 1949.

**William F. Hansen** ..... Assistant Professor Emeritus of Music  
B.S., M.S., Brigham Young University, 1936, 1937.

**John E. Hayes** ..... Registrar Emeritus  
B.S., Brigham Young University, 1924.

**Harrison Val Hoyt** ..... Professor Emeritus of Accounting  
B.S., Purdue University, 1913; M.B.A., Harvard University, 1917;  
Ph.D., Stanford University, 1931.

**Christen Jensen** ..... Professor Emeritus of History and Political  
Science, Dean Emeritus of the Graduate School,  
and President Emeritus of the University  
B.A., University of Utah, 1907; M.A., Harvard University, 1908;  
Ph.D., University of Chicago, 1921.

**Bent F. Larsen** ..... Professor Emeritus of Art  
B.A., Brigham Young University, 1912; M.A., University of Utah,  
1922.

**John Wells McAllister** ..... Instructor Emeritus in Education  
and Public School Music.  
B.A., Brigham Young University, 1927.

**Florence Jepperson Madsen** ..... Professor Emeritus of Music  
B.M., M.M., Chicago Musical College, 1926, 1927; Doctor of Music,  
Boguslawski College of Music, 1932; B.A., Brigham Young Uni-  
versity, 1934; M.M., hon. Doctor of Music, Chicago College of  
Music, 1933.

- Franklin Madsen** ..... Professor Emeritus of Music  
B.A., M.A., Brigham Young University, 1925, 1931; B.M., 1926;  
M.M., 1927; B.M.E., 1928; Mus. Doc., 1929; M.M.E., 1932; hon.  
Doctor of Music Education, Boguslawski College of Music, 1933;  
hon. Doctor of Music Education, Chicago College of Music, 1934.
- Thomas L. Martin** ..... Professor Emeritus of Agronomy  
and Bacteriology; Dean Emeritus of the  
College of Applied Sciences  
B.A., Brigham Young University, 1912; Ph.D., Cornell University,  
1919.
- Anna Ollorton** ..... Librarian Emeritus  
B.A., Brigham Young University, 1913.
- M. Wilford Poulson** ..... Professor Emeritus of Psychology  
B.A., Brigham Young University, 1914; M.A., University of Utah,  
1919.
- Hermese Peterson** ..... Professor Emeritus of Elementary Education  
B.S., Brigham Young University, 1928.
- J. Wyley Sessions** ..... Professor Emeritus of Religious Philosophy  
B.S., Utah State Agricultural College, 1911; M.A., University of  
Idaho, 1928.
- Joseph Sudweeks** ..... Associate Professor Emeritus of  
Religion  
B.S., University of Idaho, 1912; M.A., University of Chicago, 1920;  
Ph.D., University of Wisconsin, 1925.
- Margaret Summerhays** ..... Assistant Professor Emeritus  
of Music  
B.A., Brigham Young University, 1936; Graduate, New England  
Conservatory of Music, 1916.
- Effie Warnick** ..... Professor Emeritus of Home Economics  
B.S., Utah State Agricultural College, 1914; M.S., Iowa State Col-  
lege, 1937.

## Members of the Instructional and Administrative Staff

### MEMBERS OF THE PRESIDENCY

- Ernest L. Wilkinson** ..... President of the University  
B.A., Brigham Young University, 1921; LL.B., George Washington  
University, 1926; S.J.D., Harvard University, 1927.
- Harvey L. Taylor** ..... Executive Assistant to the President  
B.S., University of Utah, 1921; M.A., Columbia University, 1925.
- William E. Berrett** ..... Vice President in Charge of  
Religious Education  
B.A., LL.B., University of Utah, 1924, 1933.
- William F. Edwards** ..... Vice President in Charge of  
Finance and Business Administration  
B.S., Brigham Young University, 1928; M.S., D.C.S., New York Uni-  
versity, 1930, 1937.

## THE STAFF OF THE UNIVERSITY

- Corbett Aamodt** ..... Assistant Professor of Physics (1954)  
BSEE, University of Utah, 1943; M.A., Ph.D., Columbia University,  
1948, 1955.
- Lorna Call Alder** ..... Assistant Professor of Elementary  
Education (1949)  
B.S., Brigham Young University, 1935; M.A., Columbia University,  
1940.
- A. Lester Allen** ..... Assistant Professor of Zoology (1954)  
A.B., Ph.D., University of California at Los Angeles, 1946, 1951.
- Mark K. Allen** ..... Professor of Psychology (1946)  
B.A., Brigham Young University, 1926; M.A., Stanford University,  
1935; Ph.D., Stanford University, 1955.
- Mildred Elizabeth Allred** ..... Instructor in Nursing (1954)  
Diploma, Latter-day Saints Hospital, Salt Lake City, 1925; B.S.,  
Brigham Young University, 1943.
- Mignon Herrin Alward** ..... Instructor in Nursing (1953)  
Diploma, Latter-day Saints Hospital, Salt Lake City, 1945; B.S.,  
University of Utah, 1946.
- Hans Verlan Andersen** .... Assistant Professor of Accounting (1953)  
B.S., Brigham Young University, 1940; LL.B., Stanford University,  
1946; LL.M., Harvard University, 1948; C.P.A., State of Arizona,  
1943.
- Rayola H. Andersen** ..... Instructor in Nursing (1953)  
Diploma, Latter-day Saints Hospital, Salt Lake City, 1948; B.S., Uni-  
versity of Utah, 1949.
- Edward P. Anderson** ..... Assistant Professor of  
Electrical Engineering (1952)  
B.S., M.S., University of Utah, 1948, 1951.
- Keith Phillips Anderson** .... Associate Professor of Chemistry (1953)  
B.A., Brigham Young University, 1946; Ph.D., Cornell University,  
1950.
- Leland E. Anderson** ..... Instructor in Religion (1954)  
B.S., M.A., University of Utah, 1927, 1928.
- Vivian Anderson** ..... Instructor in Nursing (1954)  
Diploma, Highland School of Nursing, Oakland, Calif., 1947;  
B.S., Brigham Young University, 1950.
- J. Roman Andrus** ..... Associate Professor of Art and  
Education (1943)  
B.S., M.S., Brigham Young University, 1942, 1943.
- Clarence D. Ashton** ..... Associate Professor of Horticulture  
and Landscape Architecture (1951)  
B.S., Brigham Young University, 1929.
- Charles L. Atkinson** ..... Assistant Professor of Physical  
Education; Head Football Coach (1948)  
B.S., M.S., University of Idaho, 1941.

- Hyrum J. Babcock** ..... Assistant Professor of Elementary Education (1954)  
B.A., M.A., Ph.D., University of California, 1939, 1940, 1953.
- Major Irwin L. Bailie** .... Assistant Professor of Air Science (1953)
- \*Ariel S. Ballif** ..... Professor of Sociology; Acting Dean of the Summer School (1938)  
B.S., Brigham Young University, 1925; M.A., Ph.D., University of Southern California, 1937, 1945; (On leave as President of the New Zealand Mission.)
- Richard Ballou** ..... Instructor in Music (1951)  
A.B., M.A., Brigham Young University, 1948, 1953.
- Reid E. Bankhead** ..... Assistant Professor of Religion (1949)  
B.S., University of Utah, 1947; M.Th., Brigham Young University, 1949.
- Blauer Lorenzo Bangerter** ..... Instructor in Physical Education (1953)  
B.A., Brigham Young University, 1951.
- James L. Barker** ..... Professor of Modern Languages (1952)  
B.A., University of Utah, 1901; L. es L., Universite de Neuchatel, 1911; Research in phonetics for Modern Language, Association of America, 1924-25 and 1926-27; Member, Societe de Linguistique de Paris; Officier d'Academie.
- Frances P. Barlow** ..... Instructor in Human Development and Family Relationships (1954)  
B.S., University of Utah, 1933; M.Ed., Utah State Agricultural College, 1938.
- Irene S. Barlow** ..... Professor of Economics and Management of the Home (1934)  
B.S., Utah State Agricultural College, 1919; M.S., University of Chicago, 1934.
- Owen L. Barnett** ..... Associate Professor of Educational Administration (1950)  
B.S., M.S., Brigham Young University, 1923, 1927.
- Vernon S. Barney** ..... Instructor in Health and Physical Education (1953)  
B.S., Utah State Agricultural College, 1948; Diploma in Physical Therapy, Children's Hospital Association School of Physical Therapy, University of California at Los Angeles, 1951.
- Ivan J. Barrett** ..... Assistant Professor of Religion (1953)  
B.S., Utah State Agricultural College, 1938; M.S., Brigham Young University, 1947.
- Davis Bartholomew** ..... Professor of Electrical Engineering (1954)  
B.S., University of Utah, 1928; M.S., University of Minnesota, 1940.
- \*J. LaVar Bateman** ..... Associate Professor of Speech (1949)  
B.A., Brigham Young University, 1941; M.S., Ph.D., University of Wisconsin, 1947, 1950. (On leave as Visiting Instructor, Territorial College, Agana, Guam.)
- Edith Bartholomew Bauer** ..... Assistant Professor of Secondary Education (1945)  
B.A., M.A., Brigham Young University, 1930, 1946.

- Leland Kirk Baxter** ..... Assistant Professor of  
Mechanical Engineering (1953)  
B.S., University of New Mexico, 1948; M.S., Ph.D., Purdue University,  
1952, 1953.
- D Elden Beck** ..... Associate Professor of Zoology and  
Entomology (1938)  
B.A., M.A., Brigham Young University, 1929, 1930; Ph.D., Iowa  
State College, 1933.
- Jay V. Beck** ..... Professor of Bacteriology (1951)  
B.A., M.A., Brigham Young University, 1933, 1936; Ph.D., Univer-  
sity of California (Berkeley), 1940.
- B. West Belnap** ..... Associate Professor of Church Organization  
(1951)  
Director of Undergraduate Studies in Religion  
B.S., Brigham Young University, 1946; M.A., Ed.D., Columbia  
University, 1950, 1951.
- Marion Bennion** ..... Assistant Professor of Food and Nutrition  
B.S., Utah State Agricultural College, 1946; M.S., Teachers' College,  
Columbia University, 1948.
- Anthony I. Bentley, Sr.** ..... Instructor in Religion (1954)  
A.B., Brigham Young University, 1930; M.A., University of Southern  
California, 1940.
- Joseph T. Bentley** ..... Assistant Professor of Accounting (1953)  
B.S., M.S., Brigham Young University, 1928, 1954; C.P.A.
- William E. Berrett** ..... Professor of Religion (1948)  
B.A., LL.B., University of Utah, 1924, 1933.
- Max Joseph Berryessa** ..... Assistant Professor of Elementary  
Education (1948)  
B.S., M.S., Brigham Young University, 1948, 1949.
- Harold J. Bissell** ..... Professor of Geology (1938)  
B.S., Brigham Young University, 1934; M.S., Ph.D., University of  
Iowa, 1936, 1948.
- Angus Udell Blackham** .... Associate Professor of Chemistry (1952)  
B.A., Brigham Young University, 1949; M.A., Ph.D., University of  
Cincinnati, 1950, 1952.
- Lt. Col. Rulon D. Blake** .... Assistant Professor of Air Science (1953)
- Joseph M. Boel** ..... Instructor in Physics (1946)  
B.S., Brigham Young University, 1941.
- Lillian C. Booth** ..... Counselor for Women (1938)  
B.S., M.S., Brigham Young University, 1940, 1950.
- Winnifred Bowers** ..... Instructor in Speech (1954)  
B.S., M.A., University of Utah, 1946, 1953.
- Clarence S. Boyle** .... Professor of Business Management (1927)  
B.S., Brigham Young University, 1924; M.S., Ed.D., New York  
University, 1926, 1941.
- William Brace** ..... Instructor in Library Science (1954)  
B.A., Brigham Young University, 1951; M.A., University of Chicago,  
1955.

- Reed H. Bradford** ..... Professor of Sociology (1946)  
B.A., Brigham Young University, 1937; M.A., Louisiana State University, 1939; M.A., Ph.D., Harvard University, 1941, 1946.
- Capt. Robert C. Brady** .... Assistant Professor of Air Science (1953)  
B.S., University of Utah, 1953.
- Ralph A. Britsch** ..... Associate Professor of English (1938)  
B.A., M.A., Brigham Young University, 1933, 1951.
- H. Smith Broadbent** ..... Professor of Chemistry (1946)  
B.S., Brigham Young University, 1942; Ph.D., Iowa State College, 1946.
- Rulon R. Brough** ..... Instructor in Accounting; Manager,  
Machine Accounting (1954)  
B.S., Utah State Agricultural College, 1952.
- Billings Brown** ..... Assistant Professor of Chemical Engineering  
(1953)  
B.S., M.S., Ph.D., University of Washington, 1951, 1951, 1953.
- Arthur D. Browne** ..... Associate Professor of Educational  
Psychology (1952)  
B.A., San Jose State College, 1940; M.A., Stanford University, 1943; Ph.D., Syracuse University, 1952.
- Loren C. Bryner** ..... Professor of Chemistry (1935)  
B.S., M.S., Brigham Young University, 1928, 1930; Ph.D., Iowa State College, 1934.
- Kenneth C. Bullock** ..... Associate Professor of Geology (1943)  
B.S., M.A., Brigham Young University, 1940, 1942; Ph.D., University of Wisconsin, 1949.
- Robert E. Bunker** ..... Instructor in Physical Education;  
Assistant Football Coach (1949)  
B.S., Utah State Agricultural College, 1937.
- Olive Kimball Burmingham** ..... Instructor in English (1947)  
B.A., University of Arizona, 1932; M.A., Brigham Young University, 1934.
- Percy E. Burrup** ..... Associate Professor of Educational  
Administration; Director of Laboratory Schools (1952)  
B.S., M.S., Utah State Agricultural College, 1932, 1941; Ed.D., Colorado State College of Education, 1951.
- Newbern I. Butt** ..... Associate in Library and Research (1922)  
B.S., Utah State Agricultural College, 1915; M.S., Brigham Young University, 1939.
- Edwin Butterworth** ..... Assistant Professor of Journalism (1949)  
B.A., University of Utah, 1950; M.A., Brigham Young University, 1954.
- Gaylon L. Caldwell** ..... Associate Professor of Political Science  
(1951)  
B.A., Utah State Agricultural College, 1947; M.A., University of Nebraska, 1948; Ph.D., Stanford University, 1952.
- Sterling G. Callahan** ..... Assistant Professor of  
Secondary Education (1953)  
B.A., Brigham Young University, 1937; M.A., George Washington University, 1947; Ed.D., University of Virginia, 1953.

- Jennie Campbell** ..... Associate Professor of Elementary Education;  
Director of Student Teaching (1952)  
B.S., Brigham Young University, 1928; M.A., Teachers' College,  
Columbia University, 1937.
- Dorothy Nelson Candland** ..... Assistant Professor of Elementary  
Education (1947)  
B.S., M.S., Brigham Young University, 1940, 1949.
- Ray R. Canning** ..... Assistant Professor of Sociology (1947)  
B.S., Utah State Agricultural College, 1942; M.S., Brigham Young  
University, 1948.
- Clawson Cannon** ..... Instructor in Music (1949)  
B.M., Eastman School of Music, University of Rochester, 1948;  
Diploma, Konservatorium Zurich, 1953; B.A., Brigham Young Uni-  
versity, 1954.
- Mark W. Cannon** ..... Instructor in Political Science (1955)  
B.A., University of Utah, 1949; M.P.E., M.P.A., Ph.D., Harvard  
University, 1954, 1955, 1955.
- William C. Carr** ..... Assistant Professor of History and  
Political Science (1946)  
B.A., Brigham Young University, 1934.
- M/Sgt. Harold L. Carter** ..... Instructor in Air Science (1953)
- Samuel C. Chandler** ..... Science Librarian (1952)  
B.S., M.A., Brigham Young University, 1947, 1951; M.A. in L.S.,  
George Peabody College for Teachers, 1951.
- L. Bernice Chapman** ..... Associate Professor of Nursing;  
Director of the School of Nursing (1954)  
Diploma, Community Hospital, Grinnell, Iowa, 1930; B.S., University  
of Minnesota, 1935; M.A., Columbia University, 1952.
- Thomas E. Cheney** ..... Associate Professor of English (1945)  
B.S., Utah State Agricultural College, 1930; M.A., University of  
Idaho, 1936.
- Earl M. Christensen** ..... Assistant Professor of Botany (1949)  
B.S., M.S., University of Utah, 1947, 1949; Ph.D., University of  
Wisconsin, 1954.
- Edward L. Christensen** ..... Associate Professor of Secretarial  
Training (1953)  
B.S., M.S., Ph.D., University of Utah, 1938, 1939, 1953.
- Parley A. Christensen** ..... Professor of English (1927)  
B.S., Utah State Agricultural College, 1914; M.A., Ph.D., Stanford  
University, 1925, 1927.
- \*Ross T. Christensen** .... Assistant Professor of Archaeology (1952)  
B.A., M.A., Brigham Young University, 1943, 1947. (On leave for  
further graduate work at University of Arizona.)
- Bruce B. Clark** ..... Assistant Professor of English (1950)  
B.A., University of Utah, 1943; M.A., Brigham Young University,  
1948; Ph.D., University of Utah, 1951.
- Harold Glen Clark** ..... Professor of Education;  
Director of Extension Division (1946)  
B.S., Brigham Young University, 1928; M.S., University of Southern  
California, 1934; Ed.D., George Washington University, 1942.

- Herald R. Clark** ..... Professor of Finance and Banking (1913)  
B.A., Brigham Young University, 1918; M.B.A., University of Washington, 1924.
- James Ratcliffe Clark** ..... Instructor in Religion (1938)  
B.A., M.A., Brigham Young University, 1936, 1944.
- J. Reuben Clark, III** ..... Assistant Professor of Modern Languages (1941)  
B.A., University of Utah, 1934.
- \*Marden J. Clark** ..... Instructor in English (1949)  
B.A., M.A., Brigham Young University, 1948, 1949. (On leave for further graduate work at University of Washington, Seattle.)
- Monroe H. Clark** ..... Associate Professor of Philosophy of Education and Guidance (1945)  
A.B., Columbia University, 1923; M.A., Brigham Young University, 1927.
- Selby G. Clark** .... Assistant Professor of Personnel and Guidance (1953)  
B.S., University of Utah, 1948; M.A., University of Minnesota, 1949; Ed.D., State College of Washington, 1953.
- A. John Clarke** ..... Associate Professor of Secondary Education (1938)  
B.S., M.S., Brigham Young University, 1938, 1942; Ed.D., Colorado University, 1950.
- Morris M. Clinger** ..... Assistant Professor of Speech (1936)  
B.A., M.A., Brigham Young University, 1932, 1946.
- Major Glannin A. Cloward** ..... Assistant Professor of Air Science (1954)
- Thelma Cochran** ..... Assistant Professor of Nursing (1954)  
Diploma, Brooklyn Hospital School of Nursing, 1947; B.S., New York University, 1935; M.A., New York University, 1953.
- Ivan L. Corbridge** ..... Associate Professor of Economics (1952)  
B.A., Utah State Agricultural College, 1946; M.S., University of Chicago, 1948; Ph.D., Washington State College, 1952.
- \*Clarence Cottam** ..... Professor of Biology; Dean of the College of Biological and Agricultural Sciences (1954)  
B.S., M.S., Brigham Young University, 1926, 1927; Ph.D., George Washington University, 1936. (On leave as Director, Wilder Wildlife Foundation, Texas.)
- Cynthia Ann Cowan** ..... Instructor in Physical Education (1948)  
B.A., University of Utah, 1947; M.S., University of Washington, 1952.
- Marshall R. Craig** ..... Assistant Professor of English (1953)  
B.S., Brigham Young University, 1941; M.A., Columbia University, 1947.
- Lars G. Crandall** ..... Assistant Professor of Secretarial Training (1944)  
B.S., M.S., Brigham Young University, 1944, 1945.
- Major Robert G. Crawford** ..... Assistant Professor of Air Science (1954)



- Evan M. Croft** ..... Associate Professor of Secretarial Training (1936)  
B.S., Brigham Young University, 1929; M.S., University of Southern California, 1940.
- David M. Crowton** ..... Instructor in Physical Education; Assistant Football Coach (1937)  
B.S., Brigham Young University, 1938.
- Joseph K. Davies** ..... Instructor in Economics (1953)  
B.S., Marquette University, 1945; M.S., Brigham Young University, 1950.
- \*C. Edwin Dean** ..... Instructor in Mathematics (1949)  
B.S., M.S., Brigham Young University, 1950, 1952. (On leave for further graduate work at the University of Michigan.)
- Gerrit de Jong, Jr.** ..... Professor of Modern Languages; Dean of the College of Fine Arts (1925)  
B.A., M.A., University of Utah, 1920, 1925; Ph.D., Stanford University, 1934.
- Fred W. Dixon** ..... Assistant Professor of Physical Education; Tennis and Golf Coach (1928)  
B.S., M.S., Brigham Young University, 1926, 1939.
- Owen G. Dixon** ..... Instructor in Physical Education; Assistant Football Coach (1947)  
B.S., Brigham Young University, 1946.
- Mignon Domgaard** ..... Instructor in Clothing and Textiles (1954)  
B.S., Utah State Agricultural College, 1943; M. of H.E., Oregon State College, 1954.
- Lester N. Downing** ..... Assistant Professor of Personnel and Guidance (1954)  
B.S., M.S., Utah State Agricultural College, 1947, 1949; Ed.D., Colorado State College of Education, 1951.
- Roy W. Doxey** ..... Assistant Professor of Religion (1948)  
B.A., M.A., George Washington University, 1938, 1940.
- Don L. Earl** ..... Associate Professor of Music (1946)  
B.A., M.A., Brigham Young University, 1940, 1947; Ph.D., Indiana University, 1952.
- E. John Eastmond** ..... Associate Professor of Physics (1951)  
B.A., Brigham Young University, 1937; Ph.D., University of California, 1943.
- Blaine Ellis Edlefsen** ..... Instructor in Music (1953)  
B.A., Brigham Young University, 1952; M. Mus., Eastman School of Music, University of Rochester, 1953.
- William F. Edwards** ..... Professor of Finance and Banking; Dean of the College of Commerce (1951)  
B.S., Brigham Young University, 1928; M.S., D.C.S., New York University, 1930, 1937.
- Robert Lindsay Egbert** ..... Professor of Educational Psychology (1955)  
B.S., M.S., Utah State Agricultural College, 1947, 1948; Ph.D., Cornell University, 1949.

- J. Orval Ellsworth** ..... Professor of Business Management and Religion (1954)  
B.S., Utah State Agricultural College, -1917; M.S., Ph.D., Cornell University, 1924, 1926.
- Ross S. Esplin** ..... Instructor in English (1953)  
B.A., M.A., Brigham Young University, 1947, 1949.
- David Louis Evans** ..... Instructor in English (1954)  
A.B., Idaho State College, 1948; M.A., University of Utah, 1953.
- Lucille Evans** ..... Instructor in Music (1951)  
B.A., Brigham Young University, 1948.
- Dean B. Farnsworth** ..... Associate Professor of English (1953)  
B.A., M.A., University of Utah, 1946, 1947; Ph.D., University of California (Berkeley), 1950.
- Raymond B. Farnsworth** ..... Professor of Agronomy; Acting Dean of the College of Biological and Agricultural Sciences (1946)  
B.S., Brigham Young University, 1937; M.S., Massachusetts State College, 1938; Ph.D., Ohio State University, 1941.
- R. Kent Fielding** ..... Instructor in History (1952)  
B.S., M.S., Brigham Young University, 1950, 1952.
- Allen D. Firmage** ..... Associate Professor of Engineering (1955)  
B.S.C.E., University of Utah, 1940; M.S., Massachusetts Institute of Technology, 1941.
- Albert L. Fisher** ..... Instructor in Geography (1954)  
B.S., University of Utah, 1951; M.A., Ph.D., Johns Hopkins University, 1952, 1954.
- Royce P. Flandro** ..... Instructor in Secondary Education (1953)  
B.S., M.S., University of Utah, 1948, 1950.
- Harvey Fletcher** ..... Professor of Physics; Dean of the College of Physical and Engineering Sciences; Director of the Research Division (1952)  
B.S., Brigham Young University, 1907; Ph.D., Chicago University, 1911; hon.Sc.D., Columbia University, 1935; hon.Sc.D., Kenyon College, 1942; hon.Sc.D., Stevens Institute of Technology, 1942; hon.Sc.D., Case School of Applied Sciences, 1942; hon.Sc.D., University of Utah, 1944; hon.Sc.D., Brigham Young University, 1954.
- Harvey Jr. Fletcher** ..... Assistant Professor of Mathematics (1953)  
B.S., Massachusetts Institute of Technology, 1944; M.S., California Institute of Technology, 1948; Ph.D., University of Utah, 1954.
- Dean K. Fuhrman** ..... Associate Professor of Engineering (1954)  
B.S., M.S., Utah State Agricultural College, 1941, 1950; Ph.D., University of Wisconsin, 1952.
- LaVell C. Gamett** ..... Assistant Professor of Industrial Arts (1947)  
B.S., Brigham Young University, 1935; M.S., University of Oregon, 1951.
- \***B. Delworth Gardner** .. Instructor in Business Management (1954)  
B.S., M.S., University of Wyoming, 1952, 1954. (On leave for further graduate work at University of Chicago.)

- Elizabeth Louise Gardner** ..... Instructor in Clothing and Textiles  
and in Housing and Design (1952)  
B.S., Utah State Agricultural College, 1948; M.S., University of California at Los Angeles, 1954.
- \*John Hale Gardner** ..... Associate Professor of Physics (1949)  
B.S., Utah State Agricultural College, 1943; M.A., Ph.D., Harvard University, 1947, 1950. (On leave with Ramo Wooldridge Corporation, Los Angeles.)
- Crawford Gates** ..... Associate Professor of Music (1948)  
B.A., San Jose State College, 1944; M.A., Brigham Young University, 1948; Ph.D., Eastmond School of Music, University of Rochester, 1954.
- \*David D. Geddes** ..... Instructor in Physical Education and Health (1952)  
B.S., M.S., Brigham Young University, 1950, 1952. (On leave for further graduate work at the University of Southern California.)
- O. Norman Geertsen** ..... Assistant Professor in Physics (1941)  
B.S., Brigham Young University, 1930; M.S., University of California at Los Angeles, 1951.
- M. Carl Gibson** ..... Instructor in Modern and Classical Languages (1949)  
B.A., M.A., Brigham Young University, 1947, 1949.
- Preston R. Gledhill** ..... Associate Professor of Speech (1947)  
Degré Supérieur, La Sorbonne, 1938; B.A., Brigham Young University, 1939; M.A., Louisiana State University, 1940; Ph.D., University of Wisconsin, 1951.
- James Rex Goates** ..... Professor of Chemistry (1947)  
B.S., Brigham Young University, 1942; Ph.D., University of Wisconsin, 1947.
- Nan Osmond Grass** ..... Instructor in English (1951)  
A.B., Brigham Young University, 1930; M.A., Stanford, 1954.
- 1st Lt. Phillip L. Grindstaff** ..... Assistant Professor of Air Science (1955)  
B.S., Brigham Young University, 1950.
- Stewart L. Grow** ..... Associate Professor of History and Political Science (1947)  
B.S., M.S., Brigham Young University, 1935, 1948; Ph.D., University of Utah, 1954.
- Donworth Gubler** ..... Instructor in Modern Languages (1954)  
B.A., M.A., Brigham Young University, 1948, 1949.
- Norman Gulbrandsen** ..... Assistant Professor of Music (1951)  
B.S., University of Utah, 1942; M.M., Northwestern University, 1948.
- Richard L. Gunn** ..... Assistant Professor of Art and Education (1948)  
B.S., M.S., Brigham Young University, 1947, 1950.
- LeRoy R. Hafen** ..... Professor of History (1954)  
A.B., Brigham Young University, 1916; M.A., University of Utah, 1919; Ph.D., University of California, 1924; Litt.D., University of Colorado, 1935.

- William J. Hafen** ..... Instructor in Physical Education  
Director of Intramurals (1954)  
B.S., Brigham Young University, 1950; M.A., State College of Wash-  
ington, 1953.
- Richard W. Hales** ..... Assistant Professor of Physics (1952)  
B.S. Iowa State College, 1946; Ph.D., University of California, 1952.
- Wayne B. Hales** .... Professor of Physics and Mathematics (1930)  
B.A., Brigham Young University, 1916; M.A., University of Utah,  
1922; Ph.D., California Institute of Technology, 1926.
- Merrill J. Hallam** ..... Associate Professor of Agronomy (1952)  
B.S., Brigham Young University, 1950; Ph.D., Iowa State College,  
1952.
- John R. Halliday** ..... Professor of Music (1936)  
B.A., M.A., Brigham Young University, 1935, 1936; Ph.D., Eastman  
School of Music, University of Rochester, 1941.
- Lawson D. Hamblin** ..... Acquisition Librarian (1948)  
B.A., Brigham Young University, 1938; LL.B., Washington College  
of Law, 1948.
- George H. Hansen** ..... Professor of Geology and Geography;  
Dean of the Graduate School (1927)  
B.S., Utah State Agricultural College, 1918; M.S., Ph.D., George  
Washington University, 1925, 1927.
- Harold I. Hansen** ..... Professor of Speech (1952).  
B.S., Utah State Agricultural College, 1937; M.A., Ph.D., State Uni-  
versity of Iowa, 1940, 1949.
- Ralph Hansen** ..... Assistant Reference Librarian (1953)  
B.A., M.A., Brigham Young University, 1951, 1954.
- Kenneth R. Hardy** ..... Instructor in Psychology (1954)  
B.A., M.A., University of Utah, 1948, 1949; Ph.D., University of  
Michigan, 1954.
- Maurine Harris** ..... Instructor in Nursing (1955)  
Diploma, Latter-day Saints Hospital, Salt Lake City, 1948; B.S.,  
University of Utah, 1949.
- Bertrand F. Harrison** ..... Professor of Botany (1929)  
B.S., M.S., Brigham Young University, 1930, 1931; Ph.D., Uni-  
versity of Chicago, 1937.
- Charles J. Hart** ..... Professor of Recreation and of Physical  
and Health Education (1925)  
B.S., Utah State Agricultural College, 1922; M.A., Ed.D., New York  
University, 1932, 1945.
- Edward L. Hart** ..... Associate Professor of English (1952)  
B.S., University of Utah, 1939; M.A., University of Michigan, 1941;  
D. Phil., Oxford University (England), 1950.
- Jack A. Hartvigsen** ..... Instructor in Education (1953)  
B.S.M.E., University of Idaho, 1944; M.Ed., Brigham Young Univer-  
sity, 1955.
- Floyd E. Haupt** ..... Instructor in Mathematics (1954)  
B.S., M.S., University of Arizona, 1947, 1948.
- Franklin R. Haymore** ..... Manager, University Press (1939)  
B.S., Brigham Young University, 1939.

- C. Lynn Hayward** ..... Professor of Zoology (1930)  
B.S., M.S., Brigham Young University, 1927, 1931; Ph.D., University of Illinois, 1941.
- Alma Heaton** ..... Instructor in Physical Education and Recreation (1953)  
B.S., M.S., Utah State Agricultural College, 1950, 1951.
- Lynn M. Hilton** ..... Assistant Professor of Education; Assistant Director of Extension Division (1953)  
B.S., M.S., University of Utah, 1950; Ph.D., University of Chicago, 1952.
- Beth S. Hinman** ..... Instructor in Economics and Management of the Home and in Housing and Design (1952)  
B.S., Utah State Agricultural College, 1950.
- Harry Hodson** ..... Associate Professor of Civil Engineering (1953)  
B.Sc., B.E., University of Sydney, 1938, 1940.
- Leona Holbrook** ..... Professor of Physical Education (1937)  
B.S., University of Utah, 1929; M.A., Ed.D., Columbia University, 1935, 1950.
- Elliot C. Howe** ..... Assistant Professor of Elementary Education (1951)  
B.S., M.S., Brigham Young University, 1947, 1950.
- Robert J. Howell** ..... Assistant Professor of Psychology (1952)  
B.A., M.A., Ph.D., University of Utah, 1948, 1949, 1951.
- Gordon D. Hoyt** ..... Assistant Professor of Physics (1954)  
B.S., M.A., Ph.D., University of Michigan, 1939, 1941, 1950.
- Alva Lou Hunt** ..... Instructor in Nursing (1954)  
B.S., University of Utah, 1953; Dietetic Internship, Bronx Veterans Hospital, 1954.
- Jay B. Hunt** ..... Assistant Professor of History and Political Science (1950)  
B.A., M.A., Ph.D., University of Utah, 1947, 1948, 1950.
- \*Edmond Preston Hyatt** ..... Instructor in Geology (1950)  
B.S., M.S., Missouri School of Mines, 1949, 1950. (On leave for further graduate work at University of Utah.)
- Henry L. Isaksen** ..... Associate Professor of Personnel and Guidance; Coordinator of Student Organizations (1952)  
B.A., San Jose State College, 1939; M.A., Stanford University, 1948; Ph.D., University of Utah, 1951.
- Charles Edward Jacob** ..... Associate Professor of Geology (1953)  
B.S., University of Utah, 1935; M.S., Columbia University, 1936.
- Briant S. Jacobs** ..... Associate Professor of English (1946)  
B.A., Brigham Young University, 1939; Ph.D., State University of Iowa, 1944.
- Margaret S. Jacobs** ..... Instructor in Food and Nutrition and in Homemaking Education (1952)  
B.S., Brigham Young University, 1926; M.A., Teachers College, Columbia University, 1936.

- Agnes Jahraus** ..... Assistant Professor of Nursing (1954)  
Diploma, University of Minnesota, 1946; B.A., Jameston College, Jamestown, N.D., 1937; M.A., Teachers College, Columbia University, 1954.
- M. Wells Jakeman** ..... Associate Professor of Archaeology (1946)  
B.A., University of Utah, 1931; M.A., University of Southern California, 1932; Ph.D., University of California, 1938.
- Martha R. Jenny** ..... Associate Professor of Nursing (1952)  
Diploma, Presbyterian Hospital School of Nursing, Chicago, 1926; B.S., Teachers College, Columbia University, 1939; M.S., University of Wisconsin, 1946.
- Mary Bee Jensen** ..... Instructor in Physical Education and Recreation (1953)  
B.A., Park College of Missouri, 1939.
- Vern Harmon Jensen** ..... Instructor in Personnel and Guidance (1949)  
B.S., M.S., Brigham Young University, 1948, 1950.
- Edgar M. Jenson** ..... Professor of Education; Director of the Teacher Placement Bureau (1927)  
B.A., M.A., Brigham Young University, 1916, 1919.
- Gloria D. Jenson** ..... Instructor in Library Science (1954)  
B.S., Brigham Young University, 1950; M.S., Columbia University, 1954.
- Ethel Lee Jewell** ..... Instructor in Food and Nutrition; Resident Housing Consultant in Home Economics (1953)  
B.S., University of Utah, 1946.
- James Lorin Jex** ..... Instructor in Speech (1949)  
B.A., M.A., Brigham Young University, 1947, 1950.
- H. Thayne Johnson** ..... Assistant Librarian (1952)  
B.A., M.A., Brigham Young University, 1950, 1952.
- Garth N. Jones** ..... Instructor in Political Science (1953)  
B.S., Utah State Agricultural College, 1947; M.S., Ph.D., University of Utah, 1948, 1954.
- Jens J. Jonsson** ..... Associate Professor of Electrical Engineering (1953)  
B.S.G.E., B.S.E.E., University of Utah, 1944, 1946; M.S.E.E., Ph.D., Purdue University, 1947, 1951.
- Eleanor Jorgensen** ..... Instructor in Clothing and Textiles (1949)  
B.S., Brigham Young University, 1946; M.S. Kansas State College, 1954.
- Joseph J. Keeler** ..... Assistant Professor of Music; University Organist (1935)  
B.S., M.A., Brigham Young University, 1940, 1950.
- Edwin R. Kimball** ..... Professor of Physical Education (1935)  
B.S., Brigham Young University, 1926; M.S., University of Southern California, 1935; Ed.D., University of Oregon, 1955.
- Hattie M. Knight** ..... Reference Librarian (1941)  
B.S., Brigham Young University, 1941; B.S. in L.S., University of Denver, 1943; M.S., in L.S., George Peabody College for Teachers, 1951.

- Marion Kohler** ..... Instructor in Nursing (1954)  
Diploma, Salt Lake General Hospital, 1943; B.S., Brigham Young University, 1951.
- Mary Althea Krider** ..... Assistant Professor of Education (1954)  
B.A., University of Nebraska, 1927; Ed.M., University of Oklahoma, 1940.
- Don H. Larsen** ..... Associate Professor of Bacteriology (1952)  
B.S., Brigham Young University, 1940; M.A., University of Nebraska, 1942; Ph.D., University of Utah, 1950.
- V. Wallace Larsen** ..... Instructor in Sociology (1952)  
B.A., M.A., Brigham Young University, 1949, 1950.
- \*Clinton F. Larson** ..... Assistant Professor of English (1947)  
B.A., M.A., University of Utah, 1942, 1947. (On leave for further graduate work at University of Denver.)
- Gustive O. Larson** ..... Assistant Professor of Church History  
and Philosophy (1954)  
B.A., M.A., University of Utah, 1920, 1926.
- John LaMar Larson** ..... Instructor in Chemistry (1952)  
B.S., Brigham Young University, 1940.
- S/Sgt. John R. Lasater** ..... Instructor in Air Science (1954)
- \*Reuben D. Law** ..... Professor of Education (1936)  
B.S., M.S., Utah State Agricultural College, 1928, 1933; Ed.D., University of Southern California, 1941. (On leave as President of the Church College of Hawaii.)
- \*Harold R. Laycock** ..... Assistant Professor of Music (1949)  
B.A., M.A., Brigham Young University, 1937, 1947. (On leave for further graduate work at University of Southern California.)
- Ralph G. Laycock** ..... Assistant Professor of Music (1953)  
B.A., Brigham Young University, 1941; M.S., Juilliard School of Music, N.Y.C., 1948.
- Robert L. Layton** ..... Instructor in Geography (1954)  
B.S., M.S., University of Utah, 1951, 1952.
- \*Harold W. Lee** ..... Professor of Modern Languages (1937)  
B.A., M.A., Brigham Young University, 1938, 1940; Ph.D., Stanford University, 1946. (On leave as President of the French Mission.)
- \*R. Celdon Lewis** ..... Instructor in Geology (1953)  
B.S., Brigham Young University, 1950; M.S., University of Minnesota, 1953. (On leave for further graduate work at University of Minnesota.)
- Wesley P. Lloyd** ..... Professor of Philosophy of Education;  
Dean of Students (1935)  
B.S., M.S., Brigham Young University, 1927, 1934; Ph.D., University of Chicago, 1937.
- Howard D. Lowe** ..... Associate Professor of Accounting (1947)  
B.S., M.A., Brigham Young University, 1945, 1948; C.P.A., Utah, 1949.
- Jim H. Ludlow** ..... Assistant Professor of Speech (1948)  
B.S., Brigham Young University, 1946; M.A., College of Pacific, 1948.

- Lyle Hatch McIlff** ..... Instructor in Accounting (1952)  
B.S., Brigham Young University, 1948; M.B.A., University of Texas, 1950.
- Lena McIntosh** ..... Instructor in Food and Nutrition and in Homemaking Education (1953)  
B.S., M.S., University of Wyoming, 1945, 1950.
- John E. McKendrick** ..... Instructor in English (1953)  
B.A., M.A., University of Utah, 1942, 1949.
- H. Neil McKnight** ..... Instructor in Accounting;  
Manager, Students' Supply Association (1937)  
B.S., Brigham Young University, 1937.
- Kent H. McKnight** ..... Assistant Professor of Botany (1947)  
B.S., M.S., Brigham Young University, 1948, 1952; Ph.D., University of Michigan, 1955.
- Farrell D. Madsen** ..... Assistant Professor of Secondary Education (1947)  
B.A., M.A., Brigham Young University, 1933, 1942.
- Georgia Maeser** ..... Assistant Professor of Elementary Education (1926)  
B.S., Brigham Young University, 1928; M.A., Columbia University, 1938.
- Milton Marshall** ..... Professor of Physics (1919)  
B.A., Brigham Young University, 1918; Ph.D., University of Chicago, 1924.
- Merlin J. Mecham** ..... Assistant Professor of Speech (1954)  
B.A., Brigham Young University, 1948; M.S., Utah State Agricultural College, 1949; Ph.D., Ohio State University, 1954.
- Elmer Miller** ..... Professor of Economics (1923)  
B.A., Stanford University, 1914.
- Martin L. Miller** ..... Assistant Professor of Physics and Mathematics (1942)  
B.A., M.A., Brigham Young University, 1942, 1950.
- M/Sgt. Theodore Mitchell** ..... Instructor in Air Science (1952)
- J. C. Moffitt** ..... Professor of Education (1953)  
B.S., M.S., Brigham Young University, 1926, 1929; Ph.D., University of Chicago, 1940.
- John Weldon Moffitt** ..... Instructor in Psychology (1953)  
B.S., Brigham Young University, 1949; M.S., University of Utah, 1950; Ph.D., University of Illinois, 1953.
- Samuel C. Monson** ..... Assistant Professor of English (1952)  
B.S., Utah State Agricultural College, 1941; M.A., Ph.D., Columbia University, 1948, 1953.
- Alonzo J. Morley** ..... Professor of Speech (1928)  
B.A., M.A., Brigham Young University, 1925, 1931; Ph.D., University of Iowa, 1935.
- A. Reed Morrill** .... Professor of Educational Administration (1948)  
B.S., M.S., Brigham Young University, 1928, 1937; Ed.D., University of Oregon, 1948.



- Lawrence Morris** ..... Professor of Animal Husbandry (1952)  
B.S.A., University of Arizona, 1925; M.S., Texas A&M, 1928;  
Ph.D., Louisiana State University, 1938.
- Joseph Richard Murdock** ..... Instructor in Botany (1952)  
B.S., M.S., Brigham Young University, 1949, 1951.
- Margaret Frances Nagele** .... Assistant Professor of Nursing (1953)  
B.A., Gettysburg College, 1940; Diploma, Johns Hopkins School of  
Nursing, 1947; M.S., University of California at Los Angeles, 1953.
- Glen T. Nelson** ..... Associate Professor of Economics (1954)  
B.S., M.S., Utah State Agricultural College, 1942, 1948; Ph.D., Uni-  
versity of Illinois, 1950.
- 1st Lt. Keith J. Nelson** ..... Assistant Professor of Air  
Science (1954)  
B.S., Utah State Agricultural College, 1950.
- Hugh Nibley** ..... Professor of History and Religion (1946)  
B.A., University of California at Los Angeles, 1934; Ph.D., Uni-  
versity of California, 1938.
- Henry Joseph Nicholes** ..... Associate Professor of Zoology (1946)  
B.A., Brigham Young University, 1935; M.S., Ph.D., University of  
Wisconsin, 1939, 1941.
- Joseph K. Nicholes** ..... Professor of Chemistry (1933)  
B.A., Brigham Young University, 1916; M.A., Stanford University,  
1924.
- Max M. Nicholes** ..... Assistant Professor of Animal Husbandry  
(1954)  
B.S., Brigham Young University, 1939; D.V.M., Colorado State  
College, 1942.
- T/Sgt. Alfred C. Nielsen** ..... Instructor in Air Science (1954)
- Eve Nielson** ..... Catalog Librarian (1949)  
B.S., Utah State Agricultural College, 1945.
- Reed E. Nilsen** ..... Instructor in Physical Education;  
Assistant Football and Wrestling Coach (1948)  
B.S., M.S., Brigham Young University, 1943, 1953.
- Cecil R. Oak** ..... Instructor in Physics (1950)
- Carol Oaks** ..... Instructor in English (1946)  
B.A., Brigham Young University, 1943; M.A., University of Chicago,  
1946.
- Ernest L. Olson** ..... Instructor in English (1953)  
B.A., M.A., University of Utah, 1948, 1949.
- Major Ellis D. Orchard** ..... Assistant Professor of Air Science  
(1953)  
B.S., Idaho State College, 1950.
- Kathryn B. Pardoe** ..... Assistant Professor of Speech (1947)  
B.A., Brigham Young University, 1934.
- \*T. Earl Pardoe** ..... Professor of Speech (1920)  
B.A., Brigham Young University, 1925; M.A., University of Southern  
California, 1931; Ph.D., University of Louisiana, 1936. (On leave as  
a missionary in the New England States Mission.)

- \*Clyde A. Parker** .... Instructor in Personnel and Guidance (1953)  
B.S., M.S., Brigham Young University, 1952. (On leave for further graduate work at University of Minnesota.)
- \*Robert C. Patch** ..... Instructor in Religion (1949)  
B.A., University of New Mexico, 1945; M.Th., Brigham Young University, 1949. (On leave for further graduate work at University of California at Los Angeles.)
- Kristine Paulson** ..... Instructor in Speech (1953)  
B.A., Brigham Young University, 1949; M.A., Columbia University, 1950.
- John W. Payne** ..... Assistant Professor of Sociology (1947)  
B.A., M.A., Brigham Young University, 1936, 1948.
- \*Glenn Pearson** ..... Instructor in Religion (1951)  
B.S., Utah State Agricultural College, 1949; M.A., Brigham Young University, 1951. (On leave for further graduate work at University of California at Los Angeles.)
- Dean A. Peterson** ..... Director of Public Relations; Associate Professor of Secretarial Training (1942)  
B.S., Brigham Young University, 1938; M.S., University of Southern California, 1942.
- Hugh W. Peterson** ..... Associate Professor of Chemistry (1927)  
B.A., M.A., Brigham Young University, 1916, 1928; Ph.D., State University of Iowa, 1936.
- Iva Lou Peterson** ..... Instructor in Physical Education (1953)  
B.S., University of Utah, 1950
- Robert M. Peterson** .... Assistant Professor of Psychology (1950)  
B.A., M.A., Brigham Young University, 1947, 1950; Ph.D., University of Wisconsin 1954.
- Marion C. Pfund** ..... Professor of Food and Chemistry;  
Co-dean of the College of Family Living (1954)  
B.S., Simmons College, 1919; M.A., Vassar College, 1921; Ph.D., Yale University, 1928.
- Guy Pierce** ..... Instructor in Industrial Arts (1953)  
B.S., Brigham Young University, 1953.
- Richard D. Poll** ..... Associate Professor of History and Political Science (1948)  
B.A., M.A., Texas Christian University, 1938, 1939; Ph.D., University of California, 1948.
- J. Perry Polson** ..... Instructor in Secretarial Training (1952)  
B.S., M.S., University of Utah, 1947, 1952.
- A. Smith Pond** ..... Professor of Economics (1937)  
B.A., University of Utah, 1926; Ph.D., Northwestern University, 1942.
- \*Margaret Schow Potter** ..... Assistant Professor of Clothing and Textiles (1946)  
B.S., Brigham Young University, 1939; M.S., Oregon State College, 1949. (On leave for further graduate work at the University of Minnesota.)
- Norma Potter** ..... Instructor in Nursing (1953)  
Diploma, Latter-day Saints Hospital, Salt Lake City, 1931; B.S., University of Utah, 1950.

- Virginia Booth Poulson** ..... Instructor in Secondary Education  
and Homemaking Education (1951)  
B.S., Brigham Young University, 1931.
- Leonard W. Prestwich** ..... Instructor in Marketing (1953)  
B.S., Brigham Young University, 1948; M.S., New York University  
School of Retailing, 1949.
- Victor William Purdy** ..... Periodicals Librarian (1954)  
B.S., Brigham Young University, 1952; M.S., Columbia University,  
1955.
- Ellis Rasmussen** ..... Instructor in Religion (1951)  
B.S., M.A., Brigham Young University, 1942, 1951.
- Jesse W. Reeder** ..... Assistant Professor of History  
and Political Science (1952)  
B.S., M.S., Utah State Agricultural College, 1934, 1937; Ph.D.,  
Cornell University, 1952.
- Howard T. Reid** .... Associate Professor of Personnel and Guidance  
(1953)  
B.A., Brigham Young University, 1940; M.S., Ed.D., University of  
Southern California, 1947, 1949.
- Ernest F. Reimschiessel** ..... Instructor in Landscape  
Architecture (1942)  
B.A., M.S., Brigham Young University, 1940, 1951.
- Leonard William Rice** ..... Associate Professor of English (1942)  
B.A., Brigham Young University, 1941; M.A., Ph.D., University of  
Washington, 1943, 1950.
- Naoma Rich** ..... Librarian (1937)  
B.S., Brigham Young University, 1931; Certificate in Library Sci-  
ence, Riverside Library Service School, 1932.
- Owen Rich** ..... Instructor in Radio Speech (1950)  
B.S., Brigham Young University, 1950; M.A., University of Southern  
California, 1953.
- \*Russell R. Rich** ..... Assistant Professor of Religion (1953)  
B.S., Utah State Agricultural College, 1936; M.A., Brigham Young  
University, 1949. (On leave for further graduate work at Univer-  
sity of Wyoming.)
- Stella P. Rich** ..... Assistant Professor of English (1927)  
B.S., Brigham Young University, 1926.
- Eloise Richards** ..... Instructor in Nursing (1954)  
Diploma, Latter-day Saints Hospital, Salt Lake City, 1949; B.S.,  
Brigham Young University, 1954.
- Grant S. Richards** ..... Associate Professor of Animal  
Husbandry (1945)  
B.S., M.S., Utah State Agricultural College, 1940, 1942.
- \*Eldin Ricks** ..... Instructor in Religion (1949)  
B.S., Brigham Young University, 1941; M.A., University of South-  
ern California, 1949. (On leave for further graduate work at Drop-  
sie College, Philadelphia, Pa.)
- Chauncey C. Riddle** ..... Assistant Professor of Religion  
and Philosophy (1952)  
B.S., Brigham Young University, 1947; M.A., Columbia University,  
1951.

- J. Keith Rigby** ..... Assistant Professor of Geology (1953)  
B.S., M.S., Brigham Young University, 1948, 1949; Ph.D., Columbia University, 1952.
- Robert E. Riggs** ..... Instructor in Political Science (1955)  
M.A., M.A., University of Arizona, 1952, 1953; Ph.D., University of Illinois, 1955.
- Clarence F. Robison** ..... Assistant Professor of Physical and Health Education; Head Track Coach (1948)  
B.S., Brigham Young University, 1949; M.S., University of Michigan, 1954.
- R. Max Rogers** .... Associate Professor of Modern Languages (1945)  
B.A., M.A., Brigham Young University, 1940, 1942; Ph.D., Stanford University, 1951.
- Antone K. Romney** ..... Professor of Educational Administration; Acting Dean of the College of Humanities and Social Sciences; Assistant Dean of the College of Education (1945)  
B.S., M.S., Brigham Young University, 1933, 1934; Ed.D., Stanford University, 1947.
- Lawrence W. Sardoni** ..... Associate Professor of Music (1945)  
B.A., M.A., Brigham Young University, 1935, 1946.
- Geraldine Schilling** ..... Instructor in Physical Education and Dance (1954)  
B.S., University of Utah, 1954.
- T/Sgt. Wesley S. Schow** ..... Instructor in Air Science (1953)
- \*R. Phil Shumway** ..... Assistant Professor of Animal Husbandry (1949)  
B.S., Utah State Agricultural College, 1947; M.S., University of Minnesota, 1949. (On leave for further graduate work at Utah State Agricultural College.)
- Major Paul A. Simmons** ..... Assistant Professor of Air Science and Tactics (1951)  
B.S., Brigham Young University, 1929; M.S., Massachusetts Institute of Technology, 1950.
- John M. Simonsen** ..... Assistant Professor of Mechanical Engineering (1954)  
B.S.M.E., University of Utah, 1950; M.S.M.E., Purdue University, 1952.
- T/Sgt. James W. Sirles** ..... Instructor in Air Science (1952)  
B.S., M.S., Brigham Young University, 1954, 1955.
- W. Cleon Skousen** ..... Assistant Professor of Speech (1954)  
LL.B., George Washington University, 1940.
- Lyman Francis Smart** ..... Instructor in English (1953)  
B.A., Idaho State College, 1950; M.A., University of New Mexico, 1952.
- Carol T. Smith** ..... Special Collections Librarian (1945)  
B.A., Brigham Young University, 1940.
- Oliver R. Smith** ..... Associate Professor of Journalism (1938)  
B.A. Brigham Young University, 1938; Ph.D., State University of Iowa, 1951.

- Richard Leo Smith** .... Professor of Business Management (1947)  
B.A., University of Utah, 1946; M.B.A., Northwestern University,  
1947; C.P.A., Illinois, 1947; C.P.A., Utah, 1948.
- \***Robert Junius Smith** .... Associate Professor of Accounting (1949)  
B.S., Brigham Young University, 1948; M.B.A., Northwestern Uni-  
versity, 1949; C.P.A., Illinois, 1949; C.P.A., Utah, 1950. (On leave  
for further graduate work at Indiana University.)
- Wilford E. Smith** ..... Associate Professor of Sociology (1948)  
B.A., University of Utah, 1943; M.A., Brigham Young University,  
1948; Ph.D., University of Washington, 1952.
- William H. Snell** ..... Professor of Industrial Arts (1915)  
B.A., M.S., Brigham Young University, 1918, 1939.
- \***H. Wayne Soffe** ..... Assistant Professor of Physical Education  
(1938)  
B.S., M.S., Brigham Young University, 1938, 1941. (On leave for  
further graduate work at University of Indiana.)
- Wayne L. Sorenson** ..... Instructor in Secondary Education (1947)  
B.S., Brigham Young University, 1940.
- Irene Osmond Spears** ..... Associate Professor of English (1936)  
B.A., Brigham Young University, 1929; M.A., Ph.D., Stanford  
University, 1934, 1942.
- Sidney B. Sperry** ..... Professor of Old Testament Languages and  
Literature; Director of Graduate Studies in Religion (1932)  
B.A., University of Utah, 1917; M.A., Ph.D., University of Chicago,  
1926, 1931.
- Russell Stansfield** ..... Assistant Professor of Secretarial  
Training (1947)  
B.S., M.S., Brigham Young University, 1940, 1949.
- \***Maynard Dixon Stewart** ..... Assistant Professor of Art (1948)  
B.S., M.F.A., University of Utah, 1948, 1949. (On leave for further  
graduate work at Columbia University.)
- Robert Eugene Struthers** ..... Instructor in Speech and Dramatic  
Arts (1953)  
B.S., Utah State Agricultural College, 1949; M.S., Brigham Young  
University, 1953.
- Howard C. Stutz** ..... Assistant Professor of Botany (1953)  
B.S., M.S., Brigham Young University, 1940, 1951.
- Wylie W. Swapp** ..... Instructor in Art and Education (1952)  
B.A., Brigham Young University, 1948; M.A., University of Iowa,  
1952.
- Albert D. Swensen** ..... Associate Professor of Chemistry (1947)  
B.A., M.A., Brigham Young University, 1937, 1938; Ph.D., Louisi-  
ana State University, 1941.
- Russel B. Swensen** ..... Professor of History (1933)  
B.A., Brigham Young University, 1926; M.A., Ph.D., University  
of Chicago, 1931, 1934.
- Joseph N. Symons** ..... Professor of Sociology (1953)  
B.S., M.S., Utah State Agricultural College, 1927, 1932; Ph.D.,  
University of Chicago, 1944.

- Orea B. Tanner** ..... Assistant Professor of English (1938)  
B.A., Brigham Young University, 1932; M.A., Columbia University, 1953.
- Vasco M. Tanner** .... Professor of Zoology and Entomology (1925)  
B.A., Brigham Young University, 1915; M.A., University of Utah, 1920; Ph.D., Stanford University, 1925.
- Wilmer Webster Tanner** ..... Assistant Professor of Zoology  
and Entomology (1949)  
B.S., M.A., Brigham Young University, 1936, 1937; Ph.D., University of Kansas, 1949.
- Charles Taylor** ..... Assistant Professor of Psychology (1954)  
B.Mus., A.B., Ph.D., Syracuse University, 1940, 1948, 1954.
- Ethelyn Peterson Taylor** ..... Assistant Professor of Secretarial  
Training (1946)  
B.S., Brigham Young University, 1937; M.A., Stanford University, 1949.
- \*Harvey Darrel Taylor** ..... Assistant Professor of Modern  
Languages (1948)  
B.A., M.A., University of Arizona, 1947, 1948. (On leave for further graduate work at the University of Illinois.)
- Weldon J. Taylor** ..... Associate Professor of Marketing (1937)  
B.S., Brigham Young University, 1934; M.B.A., Harvard Graduate School of Business Administration, 1937.
- Robert K. Thomas** ..... Assistant Professor of English (1951)  
B.A., Reed College, 1947; M.A., University of Oregon, 1949.
- Woodruff C. Thomson** ..... Instructor in English (1950)  
B.A., M.A., University of Utah, 1938, 1949.
- Lucile Markham Thorne** ..... Circulation Librarian (1950)  
B.A., Brigham Young University, 1929.
- Jack J. Thurgood** ..... Instructor in Secretarial Training (1951)  
B.S., M.S., Brigham Young University, 1948, 1953.
- Glen H. Turner** ..... Assistant Professor of Art (1947)  
B.S., M.A., Brigham Young University, 1940, 1948.
- L. Elliott Tuttle** ..... Assistant Professor of Geography (1936)  
B.S., M.S., Brigham Young University, 1938, 1948.
- S. Lyman Tyler** ..... Assistant Professor of History; Director  
of Libraries (1952)  
B.S., Ph.D., University of Utah, 1949, 1951.
- Clarence Tyndall** ..... Assistant Professor of Education; Chairman  
of the Bureau of Audio-Visual Aids (1946)  
B.S., Brigham Young University, 1941; M.A., Stanford University, 1952.
- \*Lee Benson Valentine** ..... Assistant Professor of Modern  
Languages (1938)  
B.A., M.A., Brigham Young University, 1939, 1948. (On leave as President of the Argentine Mission.)

- Leo P. Vernon** ..... Associate Professor of Chemistry (1954)  
A.B., Brigham Young University, 1948; Ph.D., Iowa State College, 1951.
- J. Homer Wakefield** ..... Assistant Professor of Music (1949)  
B.S., M.S., M.A., Brigham Young University, 1924, 1933, 1950.
- Jean Anne Waterstradt** ..... Instructor in English (1945)  
B.A., Brigham Young University, 1945; M.A., University of Southern California, 1955.
- Arthur R. Watkins** ..... Associate Professor of Modern Languages (1952)  
B.A., M.A., Brigham Young University, 1941, 1942; Ph.D., Stanford University, 1948.
- Stanley H. Watts** ..... Assistant Professor of Physical Education; Head Basketball Coach (1947)  
B.S., Brigham Young University, 1938.
- Florence Webb** ..... Instructor in Physical Education and Recreation (1950)  
B.S., University of Utah, 1944; M.S., University of California at Los Angeles, 1954.
- Newell B. Weight** ..... Assistant Professor of Music (1948)  
B.A., M.A., Brigham Young University, 1938, 1946.
- \*Dale H. West** ..... Instructor in English (1947)  
B.A., Brigham Young University, 1940. (On leave for further graduate work at University of Southern California.)
- J. Morgan White** ..... Instructor in Accounting (1953)  
B.S., Brigham Young University, 1951; C.P.A., Utah, 1953.
- Ernest J. Wilkins** ..... Assistant Professor of Modern Languages (1953)  
B.A., Brigham Young University, 1947; M.A., Ph.D., Stanford University, 1949, 1954.
- Addie Amelia Wilson** ..... Instructor in Nursing (1954)  
Diploma, St. Mark's Hospital, Salt Lake City, 1950; B.S., University of Utah, 1950.
- Warren B. Wilson** ..... Assistant Professor of Art and Education (1954)  
B.S., Utah State Agricultural College, 1943; M.F.A., State University of Iowa, 1949.
- John H. Wing** ..... Assistant Professor of Chemistry (1931)  
B.S., M.S., Brigham Young University, 1926, 1934.
- Glena D. Wood** ..... Instructor in English (1952)  
B.A., Brigham Young University, 1936; M.A., University of Kentucky, 1949.
- Lael J. Woodbury** ..... Assistant Professor of Speech (1954)  
B.S., Utah State Agricultural College, 1952; M.A., Brigham Young University, 1953; Ph.D., University of Illinois, 1954.
- Asahel D. Woodruff** ..... Professor of Educational Psychology; Dean of the College of Education (1949)  
B.S., M.S., Brigham Young University, 1936, 1937; Ph.D., University of Chicago, 1941.

**Golden L. Woolf** .... Professor of Educational Administration (1934)  
B.A., M.A., Brigham Young University, 1934, 1936; Ed.D., University of California, 1940.

**E. Wayne Wright** ..... Instructor in Personnel and Guidance (1954)  
B.A., M.A., Brigham Young University, 1952, 1953.

**David H. Yarn, Jr.** ..... Assistant Professor of Theology and Religious Philosophy (1950)  
B.A., Brigham Young University, 1946; M.A., Columbia University, 1949.

\***Karl E. Young** ..... Professor of English (1930)  
B.A., M.A., Oxford University (England), 1930, 1934. (On leave for further graduate work at University of New Mexico.)

(Names of faculty members on leave are marked with asterisks (\*) in the departmental faculty listings.)

### SPECIAL INSTRUCTORS OR LECTURERS

**Jacob Bos**, Special Instructor in Music.

**Archibald F. Bennett**, M.A., Special Instructor in Religion

**Merrill Bushnell**, M.B.A. Special Instructor in Business Management.

**L. Odell Christensen**, B.S., C.P.A., Special Instructor in Accounting.

**Lathair H. Curtis**, B.A., Special Instructor in Journalism.

**Glen L. Enke**, B.S., Consulting Engineer.

**George W. Fitzroy**, Special Instructor in Piano.

**Carl Fuerstner**, Special Instructor in Piano.

**John Goddard**, Special Lecturer on Explorations.

**Donna Gosar**, Special Instructor in Journalism.

**D. Spencer Grow**, M.S., Special Instructor in Finance and Banking.

**Richard E. Hawkins**, B.S., C.P.A., Special Instructor in Accounting.

**James H. Lawrence**, Special Instructor in Journalism.

**Elmer E. Nelson**, Special Instructor in Piano.

**Hannah C. Packard**, B.A., Special Instructor in Vocal Music.

**Clyde D. Sandgren**, LL.B., Special Instructor in Political Science and Finance and Banking.

**Lorn Steinberger**, Special Instructor in Brass Instruments.

**DeLance W. Squire**, B.S., C.P.A., Special Instructor in Accounting.

**Lynn Taylor**, B.A., Special Instructor in Art.



## THE STAFF OF THE LABORATORY SCHOOLS

**Asahel D. Woodruff** ..... Dean of the College of Education  
B.S., M.S., Brigham Young University, 1936, 1937; Ph.D., University  
of Chicago, 1941.

**Percy E. Burrup** ..... Director of the Laboratory Schools  
B.S., M.S., Utah State Agricultural College, 1932, 1941; Ed.D.,  
Colorado State College of Education, 1951.

**Morris A. Shirts** ..... Principal of the Secondary School  
A.B., M.A., Brigham Young University, 1947, 1950; Ed.D., Indiana  
University, 1952.

..... Principal of the Elementary School

## The Elementary School

**Lillian A. Christensen** ..... Second Grade  
B.S., Brigham Young University, 1942.

**\*Hazel C. Clark** ..... Kindergarten  
B.S., University of Utah, 1938. (On leave for graduate work at  
Teachers College, Columbia University.)

**Bertha B. Davidson** ..... Fourth Grade  
B.S., M.S., Brigham Young University, 1950, 1954.

**Flora D. Fisher** ..... Third Grade  
B.S., M.S., Brigham Young University, 1936, 1949.

**Mima Rasband** ..... First Grade  
B.S., M.S., Brigham Young University, 1937, 1950.

**G. Morris Rowley** ..... Sixth Grade  
B.S., M.Ed., Brigham Young University, 1947, 1954.

**Ray D. Warner** ..... Fifth Grade  
B.S., University of Utah, 1950.

## The Secondary School

**Verl Allman** ..... Biological Sciences  
B.S., M.S., Brigham Young University, 1948, 1952.

**Grant D. Bendixsen** ..... Mathematics  
B.S., M.S., Brigham Young University, 1949, 1953.

**\*June E. Berry** ..... Librarian  
B.S., Brigham Young University, 1947; M.S., University of Utah,  
1952. (On leave for project study at several institutions.)

**Jesse R. Black** ..... Commercial Subjects  
B.S., Utah State Agricultural College, 1938; M.S., University of  
Utah, 1941.

**Grant M. Bushman** ..... Physical Education, Athletics  
B.S., Brigham Young University, 1948.

**Faye J. Buttle** ..... Speech, Core-Curriculum  
B.A., M.Ed., M.A., Brigham Young University, 1927, 1953, 1954.

**Julia A. Caine** ..... History, Social Studies  
B.S., Brigham Young University, 1925; M.A., Colorado State  
College of Education, 1950.

- Lane A. Compton** ..... Physical Sciences  
B.S., M.S., University of Utah, 1943, 1951.
- Alexander B. Darais** ..... Art  
B.S., Brigham Young University, 1948; M.F.A., Claremont Graduate School, 1952.
- Anna B. Hart** ..... English  
B.S., Utah State Agricultural College, 1922; M.A., University of Southern California, 1933; M.Ed., George Peabody College for Teachers, 1949.
- Billie Hollingshead** ..... Mathematics, Social Science  
A.B., Texas State College for Women, 1922; M.A., Brigham Young University, 1929; Ph.D., University of Southern California, 1935.
- Beulah M. Latimer** ..... Physical Education  
B.A., University of Utah, 1948.
- George L. Lewis** ..... Speech and Dramatic Arts  
B.A., M.A., Brigham Young University, 1941, 1947; Ph.D., University of Denver, 1954.
- Don L. McConkie** ..... Core-Curriculum, Social Studies  
B.S., M.S., Brigham Young University, 1927, 1942.
- William E. McKell** ..... Industrial Arts  
B.S., Utah State Agricultural College, 1948; M.Ed., Texas A. & M. College, 1951.
- Winston Mercer** ..... English, French  
B.S., Brigham Young University, 1942.
- E. Donald Snow** ..... Physical Education, Athletics  
B.S., M.S., Brigham Young University, 1946, 1954.
- M. LeRoy Sparks** ..... Commercial Subjects  
B.S., Utah State Agricultural College, 1928.
- Fredrick Webb** ..... Vocal Music  
B.A., M.A., Brigham Young University, 1933, 1954.

### L.D.S. Business College

- Kenneth S. Bennion** ..... Director (1923)  
B.S., University of Utah, 1933.
- Florence P. Evans** ..... Instructor in Secretarial Training (1920)
- Clara J. Evershed** ..... Assistant Registrar, Placement Director  
(1948)
- Joan McCormick Gamble** ..... Assistant Secretary (1953)
- Mary Hinckley** ..... Assistant Registrar, Night School (1942)
- Mildred Hixson** ..... Instructor in Machine Accounting (1948)
- Iris Irons** ..... Instructor in Secretarial Training (1930)
- Heber C. Kimball** ..... Treasurer (1915)  
B.S., University of Utah, 1946.
- Alfred C. Nielsen** ..... Instructor in Accounting and Religion  
(1948)  
M.A., Brigham Young University, 1939.

- W. Clifford Sessions** ..... Instructor in Accounting, Law,  
Economics (1945)  
B.S., University of Utah, 1927.
- Veda M. Skanchy** ..... Instructor in Secretarial Training (1944)  
B.S., Utah State Agricultural College, 1927.
- Burt M. Slusser** ..... Instructor in Accounting, Law, Salesmanship  
(1947)  
B.S., University of Utah, 1940.
- Lillian R. Smith** ..... Instructor in Secretarial Training
- Norma K. Swigart** ..... Instructor in Secretarial Training (1933)
- Richard T. Wootton** ..... Institute Director (1954)  
Ph.D., University of Utah, 1955.

### SPECIAL INSTRUCTORS

- Victor K. Cummings** ..... Instructor in Higher Accounting  
A.B., University of Utah, 1943; C.P.A., State of Utah.
- George W. Curtis** ..... Instructor in Accounting (1948)  
B.S., University of Utah, 1948.
- Eugene C. Hinckley** ..... Instructor in Secretarial Training (1926)  
B.S., University of Utah, 1944.
- Norma Roberts** ..... Instructor in Secretarial Training  
B.A., University of Utah, 1948.
- Lorenzo B. Summerhays** ..... Instructor in Accounting (1946)  
B.C.S., Washington, D.C., School of Law and Accountancy; C.P.A.  
State of Utah.
- Avis Rundell** ..... Instructor in Secretarial Training (1948)  
B.S., University of Utah, 1948.

### McCune School of Music and Art

- N. Lorenzo Mitchell** ..... Director (1950)

### PIANO

- Beverly Decker Adams**  
B.Mus. McCune School of Music and Art, 1947. Piano: Mabel Borg  
Jenkins, Grant Johannesen.
- Frank W. Asper**  
Graduate, New England Conservatory of Music, 1919; D. Mus.,  
Bates College, 1938. Piano: Alberto Jonas, Carlo Buonomici, Alfred  
DeVoto; Organ: Homer Humphrey; Theory: Wilhelm Klatte, Louis  
C. Elson, Stuart Mason, Wesley LaViolette; fellow, American Guild  
of Organists; organist, Salt Lake Tabernacle.
- Donna L. Behunin**  
B.Mus., McCune School of Music and Art, 1954. Piano: Jessie  
Seamons Taylor, Mabel Borg Jenkins.
- Jack E. Bowman**  
B.A., Brigham Young University, 1950; Piano: Gerrit de Jong, Jr.,  
Reid Nibley, Sumner Prindle.

**Gladys Bullock**

B. Mus., McCune School of Music and Art, 1937. Piano: Mabel Borg Jenkins, E. Robert Schmitz, Frederic Dixon; organ: Edward P. Kimball; normal methods: Raymond Burrows, Leo Podolsky.

**Maurine Dewsnap**

B. Mus., McCune School of Music and Art. Piano: John J. McClellan, Becky Almond, Edward Harris, Leslie Hodgson; composition: Wesley LaViolette.

**Edna Inglis Hamilton**

B. Mus., McCune School of Music and Art, 1943. Graduate work: Juilliard; piano: Frank W. Asper, Lonny Epstein; organ: Tracy Y. Cannon, Frank W. Asper, Henry Fusner; normal methods: Raymond Burrows.

**Ruth Draney Harris**

B. Mus., McCune School of Music and Art, 1951. Piano: Edward P. Kimball, Frank W. Asper, Tracy Y. Cannon, Mabel Borg Jenkins; organ: Tracy Y. Cannon, Frank W. Asper; theory and composition: Tracy Y. Cannon, Frank W. Asper, and Mabel Borg Jenkins; normal methods: Raymond Burrows.

**Mabel Borg Jenkins**

Graduate, New York Institute of Musical Art; B.A., University of Utah. Piano: Ernest Hutcheson, Sigismund Stojowski, James Friskin, E. Robert Schmitz, Egon Petri, Robert Casadesus, Fountainebleau, Aix en Provence, France, Summers 1947, 1951.

**Grant Johannesen (Visiting Artist Teacher)**

B. Mus., McCune School of Music and Art. Piano: Mabel Borg Jenkins, E. Robert Schmitz; Egon Petri, Robert Casadesus.

**Mavis Green Merrill**

B. Mus., McCune School of Music and Art, 1949. Piano: Mabel Borg Jenkins.

**Janis R. Minter**

B.Mus., McCune School of Music and Art, 1954. Piano: Lowell Farr, Mabel Borg Jenkins.

**Viola Taylor**

Piano: Tracy Y. Cannon, Charles Shepherd, E. Robert Schmitz; normal methods: John M. Williams, Raymond Burrows.

**Reed Paul Thompson**

B.A., M.A., Brigham Young University, 1951, 1952. Piano: Gerrit de Jong, Jr.

**Robert S. Whitmore**

B.S., University of Utah, 1954. Piano: Walter Shaw, Mabel Borg Jenkins. Theory: McCune School of Music and Art, University of Utah.

**VOICE****Earl Ottley**

Voice: Margaret Summerhays; Solon Alberti of New York City; Peter T. Tkack of Minneapolis, Minn. Special work in advanced choral conducting at Christiansen Choral School, Chicago.

**John Parrish**

Voice: Percy Rector Stephens, Lagar Samoiloff, A. L. Hettich, Thomas Salignac; coaching: Camille Decreuse, Walter Goldie; harmony and theory: New York and Paris; conducting: Albert Stoessel, Olaf Christiansen.

**Margaret Summerhays**

B.A., Brigham Young University, 1936; graduate, New England Conservatory of Music, 1916. Voice: Frederick H. Haywood, Fanle Hemstreet, Sophia Cechenovska, Ives Finayre; coaching: Guilo Setti, Pietro Cimini, Gabriel Lapiere; repertoire: Walter Goldie, Charles Baker, Emil J. Polok; dramatic expression: S. B. L. Joseph.

**VIOLIN****Reginald Beales**

Violin: Edgar Drake, Michael Posner Baxte.

**William Radinger**

Graduate, Vienna Conservatory, Vienna, Austria, 1926.

**Aurelia C. Shimer**

Violin: Willard Weihe, Albert Shepherd, William Hardiman, Lawrence Sardoni, Zoellner.

**ORGAN****Frank W. Asper (See Piano Department.)****William M. Foxley**

B.Mus., McCune School of Music and Art. Organ: Frank W. Asper; Germaro D'onoprio, Conservatory of Music, Naples, Italy; Allen Bacon, College of the Pacific.

**Edna Inglis Hamilton (See Piano Department.)****N. Lorenzo Mitchell**

Supervisor of Music Degree, University of Alberta, Canada. Piano: Fletcher Carman, England; Tracy Y. Cannon. Organ: Tracy Y. Cannon. Orchestration: G. W. Rouse. Voice: Leo M. Coombs.

**Alexander Schreiner**

B.A., Ph.D., University of Utah, 1942, 1954. Organ and theory: John J. McClellan Charles Marie Widor, Louis Vierne, Henri Libert; fellow, American Guild of Organists; organist, Salt Lake Tabernacle.

**CHORAL CONDUCTING****J. Spencer Cornwall**

Conducting: Otto Meissner, Daniel Protheroe, Osborne McConathy; piano and organ: Cyril Graham, Max Obendorfer; voice, theory, and public school music: George Nelson, T. P. Gliddings, and at Northwestern University and Columbia School of Music, Chicago; Director, Salt Lake Tabernacle Choir.

**ORCHESTRAL INSTRUMENTS****Dean Alsop (Brass)**

B.A., Brigham Young University, 1938. Trumpet-cornet: Will Bickert; trumpet soloist: Brigham Young University Concert Band and Symphony Orchestra.

**Vaughan Cundick (Woodwind)****Marian Robertson (Cello)**

B.A., Brigham Young University, 1948; M.A., University of Utah, 1952. Cello: Ionre Hartman, Conservatory of Mexico; Duchon-Doris, Conservatory of Lyons, France; Maurice Marechal, National Conservatory, Paris; Adolph Frezin, cellist, Paganini Quartet; and Joseph Wetzels, solo cellist Utah Symphony Orchestra.

**THEORY**

**Frank W. Asper** (See Piano Department.)

**Reginald Beales** (See Violin Department.)

**Maurine Dewsnup** (See Piano Department.)

**N. Lorenzo Mitchell** (See Organ Department.)

**Viola Taylor** (See Piano Department.)

**SPEECH AND DRAMA**

**Georgiana Taylor Lees**

B.A., M.A., University of Utah, 1926, 1952. Acting: Richard Boleoslavsky, Maria Ouspenskaya, American Laboratory Theatre, New York; diction: Margaret Pendergast McLean; voice: Margaret Dessoff; radio: University of Wisconsin.

**DANCE**

**Robert J. Blake**

B.S., University of California, 1950. Modern Dance: Halprin-Lathrop Studio, San Francisco; Martha Graham, Louis Horst, Jean Erdman, New York.

**Shirley Russon Ririe**

B.S., University of Utah; M.A., New York University. Has specialized in dance with the most prominent exponents of dance in the United States. Was dance director of the Metropolitan Park District, Tacoma, Washington.

**Virginia Tanner**

B.A., University of Utah, 1941. Modern Dance: Doris Humphrey, Charles Weidman, Gertrude Shurr, Merce Cunningham, Jose Limon; ballet: Eugene Loring, Carmeleta, Nanette Charisse.

**Juan Valenzuela**

Modern Dance: Virginia Tanner; Elizabeth Waters, Sante Fe, N.M.; Martha Graham, Jose Limon, Louis Horst, New York. Ballet: Christensen Ballet School, San Francisco; George Chaffee, Katherine Dunham, New York. Primitive: Katherine Dunham.

**ART**

**Justin F. Fairbanks** (Sculpture)

B.A., University of Utah. Studied at Brigham Young University and at the Sorbonne College, University of Paris. Has exhibited extensively.

**Vere L. Matthews**

School of Fine and Applied Art, Battle Creek, Michigan.

**Harold D. Olsen**

B.F.S., University of Utah, 1954. Represented in many exhibits and private collections.

# General Requirements for Undergraduate Work

## Admission

Admission to the University is granted on the basis of an official application, the form for which will be furnished by the Admissions Office on request of the applicant.

Students planning to attend the University should submit their applications at least thirty days before the time of registration.

Students who apply for admission and are accepted by Brigham Young University are required to maintain ideals and standards in harmony with those of the Church of Jesus Christ of Latter-day Saints. The maintenance of standards of honor and integrity, of graciousness in personal behavior, of Christian ideals in everyday living, of a high standard of morality, and of abstinence from alcohol and tobacco is required of every student.

To be eligible for admission to the University as a regularly matriculated student, an applicant must be a graduate of an approved high school and must have selected nine academic units from among the areas of English, mathematics, science, social science, and foreign languages. A student who has not graduated from high school, but has sixteen units (Carnegie units) of high school credit, may be admitted if his course of study and grades are approved by the Admissions Committee. Students of low scholarship may be denied admission.

Some departments and colleges have additional requirements for admission. Students should consult other sections of the catalog to learn about these requirements.

A student nineteen years of age or over who has not met the academic requirements specified for regular admission may be admitted to the University as an unmatriculated student. He may pursue any course for which he has sufficient educational background but may not graduate without becoming regularly matriculated. Students nineteen years of age or over and all veterans are permitted to register as regular matriculated students after the successful completion of the General Educational Development Test.

Transfer students are expected to present a satisfactory academic record. Students of low scholarship may be denied entrance by the Admissions Committee.

All new freshmen and sophomores are required to take the University Entrance Test at orientation time or as scheduled by the University.

Students who are planning to enter the Graduate School should consult the Graduate School section of the catalog for information on admission.

All new students seeking admission to the University will be furnished a medical examination form by the Admissions Office. This form must be completed by a licensed M.D. and returned to the Admissions Office. Registration cannot be completed unless the medical application form has been processed and returned to the University.

## Course Divisions

Undergraduate courses of study are divided into:

- (a) Lower Division
- (b) Upper Division

Lower Division courses are numbered in the catalog from "1" to "99," upper division courses from "100" to "199."

Graduate courses are given numbers "200" and above.

## Election of Studies

The student, in electing his studies, should, with the advice and approval of the dean of the college in which he registers, elect such studies as are desirable. The major and minor, as well as the general, requirements for graduation should be kept in mind in electing studies. Each student is required to take Health 1 sometime during his freshman year and one lower division physical education course during each quarter of his freshman year. However, Air Science students need take physical education only two quarters, as two years of Air Science reduce the graduation requirement in physical education to two hours.

Should a resident student desire to take courses by correspondence or in extension classes, the approval of the student's dean must be secured, and the correspondence or extension work entered upon the regular registration card. Excess work taken by correspondence or extension classes which is not approved in this manner will not be recorded for credit. Resident students of other institutions who apply for correspondence or extension class work at this University must have their proposed registration approved by the president of the institution in which they are registered. Students wishing to transfer correspondence credits from other institutions are subject to examination by the University department concerned.

At least five quarters of lower division work should be completed before the student registers for upper division work, unless in certain sequences the dean, with the consent of the



instructor, advises otherwise. Included in the lower division work must be English 1a, 1, or 11; 2 or 12; and 3 or 13; and, for the A.B. degree, twelve hours in foreign language work. In order to qualify for the Bachelor of Arts degree, a candidate must furnish a training equivalent to 24 hours of college credit in a foreign language.

## Classification of Students

A regular student with fewer than forty-five credit hours at the beginning of the school year will be classed that year as a freshman.

A regular student with more than forty-four credit hours and fewer than ninety credit hours at the beginning of the year will be classed during that year as a sophomore.

A regular student with more than eighty-nine credit hours and fewer than one hundred thirty-five credit hours at the beginning of the school year will be classed during that year as a junior.

A regular student with more than one hundred thirty-four credit hours at the beginning of the school year will be classed during that year as a senior.

A student who has met the entrance requirements but who registers for nine hours of work or less will be classed as a "special student."

A regular student who has completed all requirements for the bachelor's degree is classed as a graduate student from that time on and must register in the Graduate School regardless of whether he registers for graduate or undergraduate courses in residence or extension or for study not intended to be used for a higher degree. Admission procedures to the Graduate School are indicated in the Graduate Catalog and apply to those who have graduated from Brigham Young University as well as from other universities.

## Credits

A student may have credit entered on the books of the University as follows: 1. For work done in the regular courses offered by the institution. 2. For work done in an accredited college when such credit is to be used for graduation from the University, the amount to be determined by the Committee on Admissions and Credits. 3. By passing a satisfactory examination in any course offered by the University under the supervision of the head of the department concerned. Credits from other schools should be filed with the Registrar upon entrance.

Special examinations for credit will be given only with the consent of the head of the department concerned, the dean of the college in which the student is registered, and the Committee on Admissions and Credits.

An incompleted course of study may be completed during the next regular quarter of the student's residence, provided that the next quarter of residence is within one year of the time of the failure to complete the course. If a student does not complete a course within the prescribed time, his grade for the course automatically becomes an "E."

By payment of an auditing fee, a student may obtain permission to audit courses of instruction. Under no circumstances can credit be obtained by means of special examinations for courses which have been audited.

A fee of \$3.00 per credit hour is charged for special examinations, provided the total fee for any one subject does not exceed \$25.00.

It is the policy of the University to send quarterly grade reports to the parents of unmarried freshmen students under twenty-one years of age and to parents of all unmarried students who are on failure or probationary status.

## Withdrawal from Classes

Students discontinuing registration at the University are required to clear their termination through the office of the Dean of Students.

Students withdrawing from individual classes shall clear with the Dean of the College or the Chairman of the Counseling Service.

- a. If a student officially withdraws from a class during the first three weeks of a quarter, the permanent record will show no registration for the class in question.
- b. If a student officially withdraws from a class during the second three weeks of a quarter, the permanent record of the student will show the letter "W" for the class in question.
- c. If a student officially withdraws after the first six weeks of each quarter, his permanent record will show "W" for classes in which the student is doing passing work at the time of withdrawal and "WE" for classes in which the student is doing failing work at the time of withdrawal. A "W" grade does not count for or against grade points in computing the grade point average. A "WE" grade counts the same as an "E" grade in negative points in computing the grade point average.
- d. If a student drops a class any time during the quarter without officially withdrawing, he will receive a grade of "UW" (meaning unofficial withdrawal) in every course so dropped. This will indicate that the student has failed to clear officially with the University. This grade will count in grade points the same as a failure grade of "E."

**Withdrawal from Evening School Classes.** Any student who wants to withdraw from a class for which he registered in the

Extension Division Office must do so by notifying the Extension Center and completing the withdrawal forms. An evening school student who does not properly withdraw will receive a failing grade.

## **University Credits Recognized**

(See University History, p. 54.)

## **Limitation on Credit in One Quarter**

Undergraduate students in good standing may register for as many as 17 hours of credit in any one quarter by following the regular registration procedures. In the case of a student who has academic ability of high quality, the Dean of a college or the Chairman of the Counseling Service may authorize the student to register for a maximum of 18 hours for the first quarter in residence and a maximum of 19 hours for any succeeding quarter. Any student who has been in residence for one quarter or more and has a cumulative average of 2.5 (or a 2.5 average in the quarter previous to registration) may register for a maximum of 19 hours without the consent of his Dean. Any student who has an average (cumulative or that of the previous quarter) of 2.5 or better may, with the consent of his Dean, register for 21 hours. Any exceptions to the above rules shall be presented to the Deans' Council for consideration.

## **Discipline**

The maintenance of standards of honor and integrity, of graciousness in personal behavior, of Christian ideals in everyday living, of a high standard of morality, and of abstinence from alcohol and tobacco is required of every student. A student's having improper associates or visiting places of questionable repute will not be tolerated.

Any pronouncement of disciplinary measures made by the President of the University becomes a part of these regulations. Violations of regulations make the offender liable to suspension or expulsion from the University.

## **Academic Standards**

Students at Brigham Young University are required to demonstrate scholastic proficiency. Students who fall below the following requirements shall be subject to being dropped from the University for low scholarship.

- a. All first quarter freshmen are required to make a .5 grade-point average or higher in order not to be placed on academic probation.

- b. A second or third quarter freshman or sophomore who fails to make a .75 grade-point average or higher shall be placed on probation.
- c. Freshmen and sophomores may be allowed a maximum of two successive quarters of probationary status.
- d. A junior, senior, or graduate student who does not maintain a cumulative grade-point average of 1.00 or higher at Brigham Young University shall be placed on academic probation.
- e. Junior, senior, and graduate students may remain on a probationary status only so long as they make a quarterly grade point average of 1.00 or higher each quarter that they are on probation.
- f. Any student who through negligence or lack of effort does not make satisfactory progress in his University work shall be discontinued from the University.
- g. Students admitted on probation are allowed only one quarter of probationary status and are required to make the same grade point average as other students of their class.
- h. Graduate and special students are required to make a grade point average of 1.0 or higher. Failure to do so results in their being placed on academic probation. These students are allowed two quarters of probationary status.

## **Reservation of Right to Change Courses**

At the time of printing of this catalog, the University intends to give the courses listed herein, but reserves the right to eliminate or discontinue any of them or to add new ones.

# Graduation

## General Requirements

For a student to be admitted to candidacy for a diploma or a degree, his scholastic record must show that he has satisfied the entrance requirements and that he can fulfill all the requirements for graduation on the completion of the courses for which he is registered. At the time of graduation each candidate must be properly registered in the University and must have completed at least forty-five hours of work in residence.

The following graduation requirements apply to all candidates for a bachelor's degree from any of the colleges of the University:

Total amount of credit .....	186 hours
Upper division work (minimum) .....	60 hours
Requirement for a major .....	30 or more hours
Requirement for a minor .....	20 hours

All candidates for a bachelor's degree to be awarded in 1959 or subsequent years must fill the group requirements listed below under the topic "General Education Requirements." Students graduating before 1959 may choose either to complete these requirements in full or to fill all group requirements as prescribed in the 1954-55 Catalog (hereafter referred to as the old program), which are also listed below. For students choosing the old program, departmental courses shall apply to the groups within which they have been classified under that program. It is recommended, however, that students under the old program endeavor to complete their group requirements from courses approved for the new program. Following is a summary of the new and old programs.

	New Program	Old Program
Physical Science .....	9 hours	12 hours
Biological Science .....	8 hours	12 hours
Social Science .....	15 hours	12 hours
English Composition .....	9 hours	.....
English and Foreign Languages ..	.....	18 hours
Humanities and Aesthetics .....	15 hours	.....

Two credit hours in religion are required of every student for each quarter in residence, including the summer quarter. To be eligible for graduation, special students enrolled at Brigham Young University shall be required to accumulate credit in religion at the ratio of one credit hour to eight credit hours in other subjects taken in residence.

Five credit hours in American History and Government are required for graduation. (See Department of History.)

Student of the University are expected to maintain acceptable standards of usage in oral and written English in recitations, written assignments, examinations, and in all other academic work. This requirement will be enforced by teachers in all subjects and by the action of a committee representing the entire University.

Lower Division Courses required:

English 1a, ~~1~~, or 11; ~~2~~ or 12; 3 or 13.

Physical Education: Three credit hours in lower division (two hours for students taking two years of Air Science).

Health 1.

All freshmen except those enrolled in Air Science are required to take one lower division course in Physical Education during each quarter of the freshman year. Air Science students are required to take Physical Education two quarters. All students are required to take Health 1 sometime during the freshman year. Students desiring exemption from physical education for medical reasons must obtain an excuse from the University physician. Written statements from the local doctor must be approved by the University physician.

A candidate for a Bachelor of Arts degree is required to furnish a training equivalent to twenty-four hours of college credit in one foreign language. A candidate for a Bachelor of Science degree is not required to submit credit in a foreign language.

Seventy-five hours of extension credit may be counted toward a bachelor's degree. Of this amount not more than thirty-five hours may be correspondence credit.

Not more than twenty-eight hours of "D" grade credit will be applied toward graduation.

Students who expect to be graduated at the end of the spring quarter should file application with their deans not later than the beginning of the winter quarter. All conditions must be removed not later than 15 days before graduation.

Students who fulfill all requirements for graduation at the close of the summer quarter and who have filed applications for graduation not later than thirty days preceding the close of the spring quarter will participate in the Summer School Commencement exercises in August.

All graduating seniors must attend the graduation exercises unless they have been excused or have made satisfactory explanations of absence. Absence will be excused when based upon any of the following reasons:

1. Prior entrance into the armed services;
2. Work at the University completed prior to the spring quarter and present employment makes it impossible to attend commencement;

3. Serious illness or death in the family or some other emergency;
4. Enrollment in another school or university; or
5. Service in the mission field.

Students not officially excused from commencement will not be graduated until they attend a later commencement in person.

The University reserves the right to change the requirements for graduation, and a candidate for graduation will be asked to comply with all changes which pertain to the uncompleted portion of his course.

## General Education Requirements

(Required of all students graduating in 1959 and thereafter)

The object of the general education requirements of the university is to introduce to the student as broadly and effectively as possible to fundamental fields of learning and assist him in coming to an understanding of some of the important influences that bear on human living. In order that these purposes may be achieved, the basic areas have been grouped, and specified courses within these areas have been approved from which students may select courses in fulfillment of general education requirements. The student is advised to fill these requirements by registering for courses in these groups at an approximate rate of four to five hours per quarter in addition to two hours in religion throughout his entire four years of study. Courses with prerequisites are preceded by a dagger (†).

### 1. Physical Science, 9 hours. (Chemistry, Geology, Physics.)

**Option 1.** At least one course must be elected from two of the following three departmental lists, so that a minimum of nine credit hours is accumulated:

Chemistry 1	(3)	Survey Course in Chemistry
Chemistry 2	(5)	Introductory Inorganic Chemistry. (for Family Living, Nursing, and Agriculture students)
Chemistry 3	(4)	Introductory Organic Chemistry. (for Family Living, Nursing, and Agriculture students)
Chemistry 7, 8	(5-5)	Introductory Inorganic Chemistry
†Chemistry 14, 15	(5-5)	Principles of Chemistry
Geology 1	(3)	Introduction to Geology
Geology 2	(1)	Introduction to Geology (may be taken only if accompanying Geology 1)
Geology 11	(5)	Physical Geology
Physics 1, 2	(3-3)	Essentials of Physics
Physics 10	(3)	Fundamentals of Physics (for Nurs- ing and Family Living students)
Physics 16	(3)	Descriptive Astronomy
Physics 21	(4)	Weather and Climate

- |                 |       |   |
|-----------------|-------|---|
| †Physics 31, 32 | (5-5) | General Physics (designed primarily for premedical and biological science majors) |
| †Physics 41, 42 | (5-5) | General Physics (designed primarily for physical science and engineering majors)  |

**Option 2.** The Physical Science requirement may be met by completing all nine hours in Physical Science 1, 2, and 3 (3-3-3), with the understanding that no part credit in these courses may be used in fulfillment of Option 1.

Physical Science 1, 2, and 3 would be suitable for students having little background in science, as well as for those who intend to specialize in a scientific field. (Not offered this year.)

**2. Biological Science, 8 hours.** (Bacteriology, Botany, Zoology and Entomology.) To satisfy the general education requirement in biological sciences, the student must complete a minimum of 8 quarter hours of college credit. This shall include at least one of the following three courses: Bacteriology 21 (Bacteriology 101 for engineering students), Botany 1, or Zoology 11 (Zoology 11b for nursing and physical therapy students). The remaining requirements shall be satisfied by taking another of these three courses or any of the following courses approved for General Education in the Departments of Bacteriology, Botany, and Zoology:

- |                   |     |   |
|-------------------|-----|---|
| †Bacteriology 101 | (5) | Microbiology (for engineering students only)                  |
| Bacteriology 121  | (3) | Water and Sewage Bacteriology (for engineering students only) |
| Bacteriology 160  | (3) | Sanitation and Public Health                                  |
| Botany 2          | (4) | The Plant Kingdom   |
| Botany 3          | (5) | The Classification of Seed Plants                             |
| Botany 10         | (3) | Trees and Shrubs  |
| †Botany 150       | (5) | Plant Ecology   |
| †Botany 165       | (3) | Plant Geography   |
| Botany 166        | (3) | Conservation of Natural Resources                             |
| Entomology 30     | (5) | Introductory Entomology                                       |
| †Zoology 18       | (3) | Heredity (Botany 18 is cross-referenced to this course)       |
| †Zoology 45       | (5) | Elementary Vertebrate Anatomy and Physiology                  |
| Zoology 48        | (5) | Human Physiology (family living students only)                |
| †Zoology 50       | (4) | Human Physiology (nursing and physical therapy students only) |
| †Zoology 51       | (4) | Human Physiology (nursing and physical therapy students only) |
| †Zoology 146      | (5) | Principles of Ecology and Bio-geography                       |
| Zoology 197       | (3) | Natural and Human Resources                                   |

**3. Social Science, 15 hours.** (Economics, Family Living, Geography, Political Science, Psychology, Sociology.) Not more than five hours of the fifteen hours credit in Social Science are to be represented by History 70, History 80, or their equivalent. At least two fields must be included in fulfillment of the remaining



requirements of these groups. Only the following courses may apply toward fulfillment of this requirement.

Economics 1	(5)	Economic Principles
Economics 161	(3)	Labor Problems
Economics 167	(5)	Government Finance
Human Development and Family Relationships 40	(3)	Child Development
Human Development and Family Relationships 50	(3)	Principles of Child Guidance
Human Development and Family Relationships 105	(3)	Achieving Success in Marriage
Human Development and Family Relationships 115	(3)	Family Relationships
Human Development and Family Relationships 142	(3)	Growth and Development During the Middle and Later Years
Geography 11	(5)	Introduction to Geography
Geography 12	(5)	Geography in World Affairs
Geography 23	(3)	Economic Geography
Geography 110	(5)	North America
Geography 130	(5)	Europe
History 70 or 80	(5)	The American Heritage
Political Science 1	(5)	Introduction to Political Science
Political Science 10	(5)	American Government
Political Science 11	(5)	State and Local Government
Political Science 12	(5)	Comparative Government
Political Science 15	(5)	Introduction to International Relations
Psychology 11	(5)	General Psychology
†Psychology 22	(3)	Applied Psychology
†Psychology 121	(5)	Psychology of Childhood and Adolescence
†Psychology 140	(4)	Psychology of Personality
†Psychology 143	(3)	Mental Hygiene
†Psychology 145	(3)	Social Psychology
Sociology 11	(5)	Introductory Sociology
Sociology 12	(5)	Social Problems
Sociology 114	(5)	Social Psychology
Sociology 124	(3)	Crime and Delinquency
Sociology 128	(3)	Race Relations

**4. Humanities and Aesthetics, 15 hours.** (Archaeology, Art, English, Literature, History, Modern and Classical Languages, Music, Speech.) In a fifteen hour total the student must take at least six hours of literature and some work in at least two other departments. A full year's beginning course of fifteen hours credit in a modern or classical language shall carry six hours of credit toward the satisfaction of this group requirement and may reduce the requirement in literature to three hours. Only the courses listed below will be counted toward the fulfillment of the requirements.

Archaeology 1	(4)	Introduction to Archaeology
†Archaeology 31	(3)	General Prehistoric Archaeology of the Old World
Archaeology 76	(2)	Cultures of the American Indians
†Archaeology 110	(3)	General Near Eastern and Biblical Archaeology
†Archaeology 118	(3)	General Classical Archaeology
†Archaeology 130	(3)	Ancient Civilizations of America
Art 1	(2)	Introduction to Art
Art 10	(2)	Theory and Practices of Design
Art 104	(2)	Art History and Appreciation
Art 106	(2)	Aesthetics
Art 107	(3)	Contemporary Art
Art 108	(3)	American Art
Art 21, 22, 23	(2-2-2)	Elementary Drawing
Art 27	(2)	Oil Painting
Art 33	(2)	Watercolor Painting
Art 59	(2)	Ceramics
Art 63	(2)	Crafts

English Literature—The student should be allowed to take any literature course for which he appears to have adequate background. Especially recommended are the following:

English 41, 42, 43	(2-2-2)	Masterpieces of American Literature
English 71, 72, 73	(2-2-2)	Masterpieces of English Literature
English 50	(4)	Introduction to Literature
English 82, 182	(4-4)	Shakespeare
English 165, 166, 167	(3-3-3)	World Classics
English 183	(3)	Milton
History 10	(5)	Ancient Civilization
History 11	(5)	Medieval and Early Modern Europe
History 12	(5)	Modern and Contemporary Europe
History 20	(5)	U.S. to 1865
History 21	(5)	U.S. since 1865
History 74	(5)	Economic and Financial History of the United States
History 100	(3)	Early Oriental History
History 101	(3)	History of the Far East
History 104	(3)	Greek History
History 107	(3)	Roman History
History 112	(3)	Renaissance and Reformation
History 123	(3)	History of Europe, 1914 to Present
History 131	(3)	History of Russia, 1900 to Present
History 140	(3)	England to 1714
History 141	(3)	England since 1714
History 166	(3)	History of Utah
History 173	(3)	Social History of the U.S.
History 179	(3)	Contemporary U.S., 1919 to Present

Modern and Classical Languages—The first year course in any foreign language fulfills six hours of the group requirement, provided that the student completes the entire course (15 hours). No credit on the group requirement will be given for part (5 to 10 hours) of the first year language course. The following

courses may be applied to satisfy the literature requirement in the Humanities and Aesthetics groups:

†French 111, 112, 113	(3-3-3)	Masterpieces of French Literature
†French 131, 132, 133	(3-3-3)	Introduction to French Literature and Culture
†German 111, 112, 113	(3-3-3)	Masterpieces of German Literature
†German 131, 132, 133	(3-3-3)	Introduction to German Literature and Culture
†Italian 111, 112, 113	(3-3-3)	Masterpieces of Italian Literature
†Portuguese 111, 112, 113	(3-3-3)	Masterpieces of Portuguese Literature
†Spanish 111, 112, 113	(3-3-3)	Masterpieces of Spanish and Spanish-American Literature
†Spanish 131, 132, 133	(3-3-3)	Introduction to Spanish Literature and Culture

(Prerequisite to the literature courses in foreign languages are 30 hours of the language or the consent of the instructor.)

Music 1	(3)	Survey Course in Music
Musicology 157	(2)	Sacred Music
Musicology 161	(2)	Sacred Music before 1650
Musicology 162	(2)	Sacred Music from 1650 to 1750
Musicology 163	(2)	Sacred Music from 1750 to the Present
†Musicology 184, 185, 186	(3-3-3)	History of Music

Participation in all choral and instrumental organizations (1 hour total)

Private instruction on any instrument or in voice (2 hours total)

†Speech 22	(3)	Interpretation of Literature
Speech 23	(5)	Fundamentals of Acting
Speech 24	(3)	Voice and Diction
Speech 124, 125, 126	(3-3-3)	Theatre History
Speech 172	(3)	Advanced Interpretation
Philosophy 108	(3)	Survey of Philosophy
Philosophy 110	(3)	Introduction to Logic
Philosophy 111	(3)	Philosophy of Science
Philosophy 112	(3)	Problems of Knowledge

**5. Religion.** In fulfilling the requirement that for each quarter of residence at B.Y.U. a student must complete two hours of credit in religion, freshmen and sophomores should normally select their courses from the following areas:

Book of Mormon 11, 12, 13; 2 credit hours per quarter  
 Church History 31, 32, 33; 2 credit hours per quarter  
 New Testament 21, 22, 23; 2 credit hours per quarter  
 Theology 4, 5, 6; 2 credit hours per quarter

Juniors and Seniors should obtain a minimum of six hours in one or more of the following areas. (Returned missionaries may

obtain all their work in the following areas rather than take the courses listed for freshmen and sophomores):

Doctrine and Covenants 131, 132, 133  
 Church History 101, 102, 103, 104, 105, 106, 114, 115, 116  
 (Students getting credit for Church History 31, 32, 33 may not receive credit for Church History 101, 102, 103.)  
 Pearl of Great Price, 2 credit hours per quarter  
 Old Testament, 2 quarters, 4 hours

Six hours of credit in the courses listed below may be applied toward a total of 24 hours of credit in religion as well as applying toward the other groups in which they are listed:

Archaeology 110 (3) General Near Eastern and Biblical Archaeology  
 Archaeology 130 (3) Ancient Civilizations of America  
 English 164 (3) The Bible as Literature  
 History 100 (3) Early Oriental History  
 History 112 (3) The Renaissance and Reformation  
 History 166 (3) History of Utah  
 Human Development and  
 Family Relationships 40 (3) Child Development  
 Human Development and  
 Family Relationships 50 (3) Principles of Child Guidance  
 Human Development and  
 Family Relationships 105 (3) Achieving Success in Marriage  
 Human Development and  
 Family Relationships 115 (3) Family Relationships  
 Human Development and  
 Family Relationships 142 (3) Growth and Development During the Middle and Later Years  
 Musicology 157 (2) Sacred Music  
 Musicology 161 (2) Sacred Music before 1650  
 Musicology 162 (2) Sacred Music from 1650 to 1750  
 Musicology 163 (2) Sacred Music from 1750 to the Present

The following courses in religion may be considered as applying toward the requirement in Humanities and Aesthetics:

Philosophy 108 (3) Survey of Philosophy  
 Philosophy 110 (3) Introduction to Logic  
 Philosophy 111 (3) Philosophy of Science  
 Philosophy 112 (3) Problems of Knowledge

## Old General Education Requirements

The following group requirements were in full effect through the academic year of 1954-55. Any student graduating prior to 1959 may elect to fill his general education requirements according to the following groups which comprised the old program, rather than by following the new program outlined in the preceding section. These groups may be filled by students up until and including 1958.

**1. Mathematics and Physical Science, 12 hours.** (Mathematics, Chemistry, Physics, Geology, and Geography.) To satisfy the twelve-hour group requirement, the student is urged to take work in at least two departments. At least one of the courses taken must require no fewer than two hours of laboratory work each week.

**2. Biology and Psychology, 12 hours.** (Bacteriology, Botany, Zoology and Entomology, and Psychology.) To satisfy the twelve-hour group requirement, the student is urged to take work in at least two departments. At least one of the courses must require no fewer than two hours of laboratory work each week. Educational psychology, a professional course for prospective teachers, will not be accepted as fulfilling this group requirement.

**3. Social Science, 12 hours.** (Archaeology, Economics, History, Political Science, and Sociology.) To satisfy the 12-hour group requirement, the student is urged to take work in at least two departments. The required five credit hours in American History and Institutions may be used toward satisfying this group requirement.

**4. English and Foreign Languages, 18 hours, at least 12 of which must be in English.** This group must include English 1, 2, and 3. If a student has credit for at least two units of foreign language taken in high school, this group may be reduced to 14 hours.

## Major and Minor Requirements

At the time of his graduation, the student must have completed at least thirty quarter hours in his major department and no fewer than twenty hours in collateral or minor subjects which meet the approval of the head of his major department.

When the prospective graduate's high school and college work shows marked evidences of deficiencies in grade of scholarship, in breadth of training, or in preparation for probable future activity, the head of the department, in consultation with the dean, may prescribe certain additional specified courses, according to the needs of the particular student.

## Registration of Prospective Secondary Teachers

All certificates for teaching, counseling, supervising, administration, and library work in the public schools of Utah are granted by the State Department of Public Instruction.

When all requirements for State certification have been fulfilled, students of the University who are registered in any of its colleges, or in the Graduate School, will be recommended for certification by the Dean of the College of Education. This recommendation will be given just as readily to prospective secondary teachers who have registered in other colleges as to those who

have registered in the College of Education, the Dean of the College of Education acting merely in an administrative capacity as the representative of the University. Students who wish to obtain a secondary teaching certificate may therefore register in either the College of Education or in the respective colleges in which their major subject matter fields are taught. Applicants for an elementary teacher's certificate are required to register in the College of Education, except those who already hold the bachelor's degree, who must register in the Graduate School.

Each student preparing to teach in the secondary schools should be encouraged to make his own decision in selecting the college in which he should register. If the student feels that he

will be aided most by registering with, and seeking continuous counsel from, those concerned primarily with the subject matter that he will teach, he should be encouraged to register in the particular college in which he selects his academic major. If he feels that he will be aided most by registering with, and seeking continuous counsel from, those concerned primarily with teaching as a profession, he should be encouraged to register in the College of Education.

Students who desire State certificates should make application with the Dean of the College of Education, who has the proper application forms in his office, and not with the State Department of Public Instruction. In this respect, as noted above, the Dean of the College of Education is acting for the entire University.

## Scholarship Honors

In recognition of especially meritorious work, scholarship honors are granted to certain members of classes graduating with the bachelor's degree. Such honors will be accorded on the following basis:

First: There are two designations in recognition of high scholarship merit: Graduation with High Honors and Graduation with Honors.

Second: The award of Graduation with Honor is made on the basis of excellence shown in work up to, but not including, the spring quarter of the senior year.

A student receiving either type of scholarship honors must rank among the highest ten per cent in scholarship in the graduating class. Graduation with High Honors will be awarded to the highest three per cent, Graduation with Honors to the next seven per cent. This rating is determined by computing a grade-point average by weighting the grades as follows: "A" counts 3, "B" counts 2, "C" counts 1, "D" counts 0, "E" counts -1; and by dividing the total number of points by the number of credit hours carried.

Fourth: It shall be the duty of the Committee on Gradua-

tion to make selection of candidates in accordance with these provisions.

**Fifth:** The announcement of honor awards is to be made at the annual commencement exercises.

**Term Honors.** The University will post and publish at the close of each quarter of the regular school year the names of the students who have carried a minimum of 15 credit hours and earned a grade point average in all classes carried of 2.5 or above. Those having grade point averages of 2.5 through 2.7 will be on the Roll of Honor and those with grade point averages of 2.8 and above will be designated on the Roll of High Honor.

# University Fees

(All fees are payable in advance)

## General Fees

### REGULAR COLLEGE AND GRADUATE STUDENTS

	Autumn Quarter	Winter Quarter	Spring Quarter	Total
Tuition .....	\$35.00	\$35.00	\$35.00	\$105.00
Building, Gymnasium, Student Activity and Health Fees ..	25.00	25.00	25.00	75.00
Total .....	60.00	60.00	60.00	180.00

### SPECIAL COLLEGE AND GRADUATE STUDENTS

	Tuition	General Service*	Total
Minimum Fee .....	\$ 5.00	\$ 2.00	\$ 7.00
Two Credit Hours .....	6.00	3.00	9.00
Three Credit Hours .....	9.00	4.00	13.00
Four Credit Hours .....	12.00	5.00	17.00
Five Credit Hours .....	15.00	6.00	21.00
Six Credit Hours .....	18.00	7.00	25.00
Seven Credit Hours .....	21.00	8.00	29.00
Eight Credit Hours .....	24.00	9.00	33.00
Nine Credit Hours .....	27.00	10.00	37.00

\*The General Service Fee does not include Health Service or Student Activity privileges.

The charge for auditing courses is the same as for taking them for credit.

Private Instruction, for credit, is \$4.00 per credit hour in addition to the instructor's fee, but no late fee is charged if all of the registration is for private instruction only.

### Refunds — College Students

In the event of withdrawal by either a regular or special student, a refund will be made on the basis of a charge of \$10.00 for a regular student, and \$5.00 for a special student, plus a per day charge of two per cent of the total fees paid for the quarter. The days charged for will be the school days beginning with the first day of the quarter on which classes were held following date on which the student registered to the day on which the student reported his withdrawal to the Office of the Dean of Students, both days inclusive.



No refund will be granted to a student who is requested to withdraw for scholarship or other cause.

The activity or receipt card must be surrendered on receiving a refund.

## MISCELLANEOUS GENERAL FEES AND FINES

Graduation fee, Bachelor's degree .....	\$10.00
Graduation fee, Master's degree .....	20.00
(Includes printing of thesis abstract)	
Registration for graduation fee (For those not previously registered in the year in which graduated) .....	2.50
Late Orientation Fee will be charged all freshmen and sophomore students registering at the University for the first time who do not report to the campus at 8:00 a.m. on the officially scheduled day for placement tests and orientation work preliminary to registration day .....	3.00
Late Registration Fee (Charged all regular and part-time students who register after the days officially scheduled for registration. No exception is made, regardless of the reason for being late.) .....	3.00
Change of Registration fee, for each change slip presented after the first week of each quarter .....	1.00
Examination, Special Equivalency, per credit hour .....	4.00
(The maximum fee in any one subject shall not exceed \$25.00.)	
Duplicate Activity Card .....	1.00
Automobile Registration and Parking Fee —	
For one quarter .....	2.00
For school year .....	5.00
Traffic Violation Fines .....	1.00 to 5.00
(Traffic Fines are used for scholarships.)	
Thesis Binding (4 copies) .....	11.00 to 13.00

## FEES FOR INSTRUCTION IN MUSIC

### (10 Lessons per Quarter)

Group I Teachers (6 or more students at same time) .....	\$10.00
Group II Teachers (3 students at same time) .....	12.00
Group III Teachers (3 students at same time) .....	13.50
Group IV Teachers (2 students at same time) .....	18.00
Group V Teachers .....	20.00
Group VI Teachers .....	25.00
Group VII Teachers .....	30.00
Group VIII Teachers .....	35.00

Group IX Teachers .....	40.00
Group X Teachers .....	45.00
Group XI Teachers .....	50.00
Group XII Teachers .....	60.00
Ballou, Richard .....	25.00
Bos, Jacob .....	30.00
Brownlee, Robert .....	25.00
Buggert, Gustav .....	25.00
Cannon, Clawson .....	30.00
de Jong, Gerrit, Jr. ....	40.00
Earl, Don .....	35.00
Edlefsen, Blaine .....	25.00
Evans, Robert .....	30.00
Fuerstner, Carl .....	45.00
Fitzroy, George W. ....	25.00
Gates, Crawford .....	30.00
Gulbrandsen, Norman .....	35.00
Halliday, John R. ....	40.00
Hamblin, Harriet .....	25.00
Hanson, Wm. F. ....	25.00
Keeler, J. J. ....	30.00
Laycock, Harold .....	30.00
Laycock, Ralph .....	30.00
Madsen, Florence J. ....	35.00
Madsen, Franklin .....	30.00
McAllister, J. W. ....	30.00
Nelson, Elmer E. ....	30.00
Nelson Elmer E. (Piano Pedagogy, 6 or more in group) each .....	10.00
Sardoni, Lawrence .....	30.00
Summerhays, Margaret .....	30.00
Wakefield, Homer .....	30.00
Weight, Newell .....	35.00

## FEES FOR VOCAL STUDY IN GROUPS

### (10 Lessons per Quarter)

Florence Jepperson Madsen	
Two students in a group, each .....	\$20.00
Three students in a group, each .....	13.50
Franklin Madsen, Summerhays, McAllister	
Two students in a group, each .....	18.00
Three students in a group, each .....	12.00

## FEES FOR PRIVATE INSTRUCTION IN SPEECH

### (10 Lessons per Quarter)

Group I .....	\$12.00
Group II .....	25.00
Group III .....	30.00
Group IV .....	35.00
Bateman, LaVar .....	25.00
Clinger, Morris M. ....	25.00

Gledhill, Preston .....	25.00
Hansen, Harold I. (12 lessons) .....	30.00
Jex, Lorin .....	25.00
Ludlow, Jim .....	25.00
Mecham, Merlin J. ....	25.00
Morley, Alonzo J. ....	25.00
Pardoe, Kathryn B. (12 lessons) .....	30.00
Pardoe, T. Earl .....	25.00
Paulsen, Kristine .....	25.00
Rich, Owen S. ....	25.00
Woodbury, Lael J. ....	25.00

## FEES FOR SPEECH CLINIC

An out-patient fee of \$12.00 per quarter is charged for rehabilitation service in the speech clinic. Such service is offered regularly enrolled students without any charge.

## FEES FOR DEPARTMENTAL FACILITIES AND SERVICES

Foods and Nutrition 40, 140 (Menu Planning and Meal Service) .....	\$ 3.00
Horticulture 12 (Flower Arrangement) .....	5.00
Instruction 118, 119, 138, 139 (Student Teaching) .....	10.00
Examination for admission to student teaching (depending on tests selected) .....	2.50 to 5.00
Additional fee for late application .....	2.50 to 5.00
Nursing 6, 10 (Fundamentals Laboratory) .....	1.50
Nursing 136 (Public Health Field Experience) .....	30.00
Physical Education 30, 40 (Golf) .....	5.00
Physical Education 32, 42 (Skiing) .....	10.00
Physical Education 44 (Outdoor Experience Through Organized Hiking) .....	5.00
Physical Education 45 (Horseback Riding) .....	20.00
Physical Education 60, 61 (Swimming) .....	10.00
Physical Education 64 (Life Saving) .....	10.00
Physical Education 65 (Water Safety Instruction) .....	10.00
Recreation 10 (Bowling) .....	5.00
Recreation 44 (Outdoor Experience Through Organized Hiking) .....	5.00
Recreation 45 (Horseback Riding) .....	20.00
Recreation 67 (Skills and Techniques for Outdoor Recreation) .....	12.00

## RENTALS

Woodwind, Brass, and String Instrument Rental per instrument per quarter .....	6.00
Organ rental, one hour each day, per quarter .....	10.00
Piano rental, one hour each day, per quarter .....	4.00
Practice Room without a piano, one hour each day, per quarter .....	2.00

## UNIVERSITY FEES

Locker Rent (McKay and Science Buildings):	
1 quarter .....	2.00
3 quarters .....	3.50
4 quarters .....	4.00
(\$1.00 is refundable on return of key)	
Duplicate key .....	.50
Locker Rent (For High School Students, Education Bldg.):	
School year .....	1.50
(50c is returnable on return of key)	
If students share a locker there is an additional	
50c for each additional key issued. The 50c for	
each such key is refunded on return of key.	

## DEPOSITS

Gymnasium Towel Check and Padlock Deposit .....	3.00
(Maximum refund is \$2.50)	
Botany 95 (Microtechniques) .....	2.00
Botany 146 (Plant Physiology) .....	2.00
Botany 245 (Plant Nutrition) .....	2.00
Botany 260 (Experimental Ecology) .....	2.00
Industrial Arts and Drawing .....	1.00
Chemistry (each Laboratory Class) .....	1.00
Civil Engineering 10, 11, 12 .....	1.00
Air Science (All AFROTC students) .....	10.00
(Fifty cents per quarter will be retained for flight insurance.)	

## Fees for Laboratory Schools

## SECONDARY SCHOOLS

Senior High School—10th, 11th, and 12th grades:	
Registration fee for the year .....	\$18.00
Activity fee .....	11.00
Gymnasium service fee .....	1.00
TOTAL FEE for the year .....	
\$30.00	
Junior High School—7th, 8th, and 9th grades:	
Registration fee for the year .....	10.00
Activity fee .....	9.00
Gymnasium service fee .....	1.00
TOTAL FEE for the year .....	
20.00	
Special students in Secondary Laboratory School, per unit	7.50

Secondary Laboratory School students who register any time during the first semester shall pay the full year's fees. Those who register the second semester in the Junior High School shall pay \$11.00, and in the Senior High School \$17.00, which amounts include the late fees.

A high school student authorized to register for college courses shall pay in addition to the high school fees \$4.00 per credit hour, but the maximum charge for the high school and college courses shall not exceed that charged a college student for the same period.

## **ELEMENTARY SCHOOL**

Kindergarten to the sixth grade, for the full year .....\$15.00

Elementary Laboratory School students who register any time during the first semester shall pay the full year's fee. Those who register during the second semester shall pay \$8.50, which amount includes the late fee.

### **LATE FEE IN LABORATORY SCHOOLS**

A late fee of \$2.00 will be charged all junior and senior high school students who register after the first week.

A late fee of \$1.00 will be charged all elementary training school students who register after the first week.

## **Refunds — Laboratory Schools**

A refund of \$25.00 will be made to any senior high school student who withdraws during the first or second week of the first semester. A refund of \$15.00 will be made to any student who withdraws after the second week and on or before the end of the first semester, but no refund will be made thereafter.

A refund of \$15.00 will be made to any junior high school student who withdraws during the first or second week of the first semester. A refund of \$10.00 will be made to any student who withdraws after the second week and on or before the end of the first semester, but no refund thereafter.

A refund of \$5.00 will be made to any elementary training school student who withdraws before the beginning of the Christmas holidays, but no refund thereafter.

No refund will be granted to a student who is requested to withdraw for scholarship or other cause.

The activity or receipt card must be surrendered on receiving a refund.

## **COLLEGE OF FAMILY LIVING NURSERY SCHOOL**

Fee per child, per quarter .....\$10.00

# Student Personnel Services

The Division of Student Personnel Services is responsible for the welfare of students in the following areas of university life:

Admissions and Credits  
 Advisor to Foreign Students  
 Attendance and Scholarship  
 Awards  
 Counseling Service  
 Health Services  
 Information Center  
 Orientation  
 Scheduling

Scholarship and Financial Aids  
 Student Employment  
 Student Housing  
 Student Organizations and  
     Social Life  
 Student Publications  
 Traffic and Security  
 Veterans' Affairs  
 Women's Activities

## Dean of Students

The Dean of Students is Director of the Special Services of the University. As such, he is expected to coordinate the agencies at **work on special student problems**. He initiates and recommends to the President and the University Council needed policies and procedures in student life. It is his responsibility to administer the program recommended or approved by the President in the various areas of the Student Personnel Services.

## Counseling Service

All new freshmen and sophomores register with the Counseling Service. This registration accomplishes several purposes. First, the student has an opportunity to explore a variety of subject areas before settling upon one as a major. Second, he has an opportunity to obtain comprehensive information about his interests, abilities, and preparation, thus learning more about himself. Third, he can receive assistance in determining his purposes and objectives in college. Fourth, he has available assistance for solving personal problems.

A student remains registered in the Counseling Service until he has elected his major. At the time of this election, the student is transferred to the appropriate college. An abstract of his record is also transmitted to that college, so that further personal attention can be given him.

The personnel of the Counseling Service is of two kinds: (1) professionally trained counselors, and (2) specially selected educational advisors. A number of educational advisors are assigned to work with the Counseling Service during registration. The student confers with the counselor in making out long-range educational plans, and at each registration time the student works out his proposed program in cooperation with his educational advisor. The student also confers with his counselor for assistance in personal problems, for extensive assistance in choosing a major, for election of his major and his transfer to a college, and for changes

in his program after the close of registration.

The Counseling Service provides the following services for the University: (1) registration service, (2) testing service, (3) counseling service—educational, vocational, and clinical, (4) occupational information service. Registration services are provided for all new freshmen and sophomores until an educational major is selected.

The Testing Service provides psychological test data for the use of the counselors and registration advisors, placement tests for various academic groups at the University, and assistance in the preparation, administration, and scoring of subject-matter tests requested by various departments in the University. Personnel tests of achievement, ability, interest, and adjustment are given to all new lower division students. The data from these tests are used as a basis for counseling in educational, occupational, and personal problems and may be supplemented by other test data as special cases require. Although the basic tests are given to all new lower division students, upper division and graduate students may avail themselves of the tests.

A comprehensive, current coverage of essential occupational information is maintained in the Counseling Service Library. Current catalogs of the major universities and technical schools are also on file at the same place.

The Counseling Service offers assistance to each individual student in helping him to make wise decisions in connection with educational, vocational, and personal problems.

## **Counselor for Women**

Of special assistance to women students is a Counselor for Women. She is a member of the Committee on Special Services and Chairman of the Committee on Women's Affairs. The Counselor for Women is available throughout each day to assist women students in solving personal problems.

## **Foreign Students Advisor**

A foreign students advisor has been appointed by the President of the University to assist foreign students in all matters pertaining to their attendance at the University. The admission of all foreign students must be cleared through this office and all foreign students are urged to contact this office on questions concerning attendance at the University. Every student from another country is expected, upon his arrival at the University, to interview the Advisor of Foreign Students, Room 180, Maeser Building.

## **Veterans' Benefits**

A rich educational offering is provided at the University for men and women from the armed forces. The Brigham Young Uni-

versity is approved for Veterans Training Benefits under both G.I. Bills: Public Law 346 and Public Law 550 (Korean Bill). Certificates of Eligibility must be restricted to Brigham Young University. Transfers must be made through the Veterans Office at the last school attended on G.I. New applications can be made with discharge form DD 214 at any Regional Office or upon arrival at the University. For further information direct your inquiry to the Veterans Coordinator, Brigham Young University, Provo, Utah.

## **Scholarships and Financial Aids**

The University grants annually to students scholarships covering from one to three quarters' tuition each on the basis of outstanding academic ability or demonstrated academic ability and outstanding ability in the areas of speech, drama, music, art, athletics, commercial training, and other academic subjects. Tournament and contest winners frequently receive these awards.

The University also awards grants-in-aid to help deserving students of good academic ability who have economic need.

To be eligible for a grant-in-aid, an athlete must meet either of the following requirements:

1. If a freshman, he must have been rated academically as in the upper two-thirds of his school graduating class. For the first year such award shall be made for the entire school year.
2. If not a freshman the student must be in good academic standing and not on probation. Such award shall be made on a quarterly basis.

A considerable number of loans are also made to worthy and needy students. These are available to all students on the basis of their qualifications and need for financial assistance.

All of the above awards and loans are under the jurisdiction of a central Scholarships, Awards, and Financial Aids Committee, which alone has the authority to promise or grant an award. All applications for grants-in-aid, scholarships or loans should be made to the chairman of this committee.

All scholarships and grants-in-aid must be applied toward the payment of tuition or fees.

Any scholarship or grant-in-aid may be withdrawn at any time for academic or other good and sufficient reasons if, in the judgment of said committee, the recipient has clearly demonstrated his failure to comply with both the spirit and the letter of the original terms of the scholarship or grant-in-aid.

## **NURSING SCHOLARSHIPS**

Nursing students interested in scholarships or grants-in-aid should communicate with the Director of the School of Nursing.



## GRADUATE SCHOLARSHIPS

For Graduate Scholarships refer to Graduate School section of this catalog.

## Placement Bureau

A full-time placement bureau exists on the campus for the purpose of assisting graduating students and alumni in finding desirable positions in their fields in business, industry, and education. This office works in close cooperation with deans and department heads.

The placement service includes a placement library where interested students may find books, articles, magazines, and brochures that will acquaint them with companies in which they may be interested and also books and pamphlets which will give advice on such matters as how to conduct oneself in an interview, the best ways of finding employment, etc.

All students are urged to register with the Placement Bureau early in the school year in which they will graduate so that that office may begin early to prepare for giving the most effective possible assistance in finding employment for each candidate for graduation. No charge is made for this service.

## STUDENT EMPLOYMENT

In the Placement Bureau assistance is given to students in finding part-time employment. This includes help not only in placing students in positions on the University campus but also in finding part-time employment off campus and in finding work for board and room.

Students are encouraged not to attempt to earn their entire way through school. Such a program leaves little time for academic work (see scholarships).

The Placement Bureau is located in the east end of the Herald R. Clark Student Service Center. Students are urged to register there as soon as possible after they arrive in Provo and are available for work. Inasmuch as it is difficult (usually impossible) to place students who are not in town, the Placement Office does not seek applications in advance. Students are not served on a first-come, first served basis. Factors which weigh most heavily in deciding who shall have jobs are need, hours available, and possession of skills required by employers. Inasmuch as the number of students seeking part-time work is very high, those whose need is great are requested to report regularly at the Placement Bureau after filing their initial applications.

Students from foreign countries are required to obtain a work permit before they may take employment. Such students may receive assistance in obtaining the necessary permit from the foreign student advisor. Students under eighteen who succeed in locating employment are required to obtain a work permit. Instructions concerning this are available in the Placement Bureau.

Inasmuch as all campus jobs must be filled through the Placement Office, students are requested not to call at the various departments in search of work.

## Student Health Service

All new students seeking admission to the University will be furnished with a medical examination form by the Admissions Office. This form must be completed by a licensed M.D. and returned to the Admissions Office.

Student health fees are used by the University for follow-up examinations, health guidance, care of minor illnesses, injuries of ambulatory nature, and such surgery and hospitalization as shall be designated from time to time by the University Committee on Student Health.

The Student Health Service facilities have been steadily increasing, with the result that now the dispensary on the campus can handle practically any of the usual health problems that may arise while the student is in school. The student health program does **not** include:

- a. Dental fillings or prosthetics
- b. Eye refractions or glasses
- c. Maternity work
- d. Problems of a chronic nature (such as hernias, chronic bone and joint diseases or deformities, chronic gastrointestinal disorders, tuberculosis, tumors, allergies, endocrine or glandular diseases, etc.)

Students who have communicable diseases or other abnormalities may not be permitted to remain in the University or may be limited in their activities.

The student health fees do not provide for surgery and hospitalization which are not authorized in advance by the University physician nor do they provide for medical calls made off the campus. If a student needs off-campus medical care and will call the Student Health Service, however, arrangements will be made for the attendance of a physician who may or may not be a member of the University health staff.

The Student Health Service has, as members of its staff, the following:

Ariel L. Williams, M.D.  
Wilford Woolf, M.D.  
Jesse J. Weight, M. D.  
Milton H. Brinton, M.D.  
Vera L. Mason, R.N.

## Student Housing and Food Service

All resident students at the University are expected, as a requirement of enrollment, to live in University-approved housing, whether it be on or off campus. The Office of Student Housing has been established to assist students with their housing needs and to administer the housing program. The Office of Student Housing operates on a year-round basis. It is located in the Herald R. Clark Student Service Center. All inquiries or administrative problems relating to housing should be referred to this office.

### ON-CAMPUS HOUSING

**For Women.** Housing for 963 women is provided in 16 residences of the Heritage Halls project, completed in the fall of 1953. These are apartment type buildings with each apartment consisting of a combination kitchen-dining-study room arrangement, three bedrooms, and a bath. In addition there are two large living rooms, a recreation room, and laundry and storage facilities in each building. Six girls occupy an apartment and live cooperatively together, preparing their own meals. The apartments are completely furnished except for bedding, kitchen utensils, and dishes. The facilities are excellent and offer a high standard of living for college students.

The University operates two residence halls for women where board and room are provided. These two halls, Amanda Knight Hall and Knight-Mangum Hall, house 418 students. The halls are completely furnished and provide every modern convenience, including well-planned food service.

A number of small University-owned homes which are operated on a cooperative basis are available for women students. The houses are furnished, except for bedding, kitchenware, and dishes. Residents in these homes do their own housework and prepare their own meals, making it possible for expenses to be kept at a minimum.

**For men.** Board and room for 426 men are provided in Allen Hall and Wymount Residence Halls. Allen Hall, located one block from campus, is a residence hall for men, consisting of living quarters, dining hall, and social room. The Wymount Residence Halls consist of seven buildings acquired from the Federal Government following World War II and moved to the University location. Food service for students living in the Wymount Halls is provided in a central dining room located in a separate building nearby.

**For Married Couples.** Family accommodations for 200 married couples and their children are provided in a housing development known as Wymount Village. These buildings were acquired from the Federal Government and moved to their present site following the war.

**Applications.** Students who expect to enroll at the University and who wish to live in University-owned housing should apply

at the earliest date to the Office of Student Housing. A \$10.00 application fee should be enclosed with the completed application form.

**Acceptance.** The validating of any on-campus housing reservations is contingent upon the students' official acceptance and admission to the University.

## OFF-CAMPUS HOUSING

Off-campus housing consists of apartments, rooms with kitchen privileges, board and room, and sleeping rooms. These facilities are inspected by the University to see that they comply with established standards before they are approved for student occupancy. Through the cooperative efforts of both the householders of the community and the University, constructive action has been taken to raise the standards of student housing throughout the community. Before making any commitment for off-campus housing students should make sure that the place they contemplate living in has been approved by the University.

## RATES

Rates for off-campus housing accommodations vary with the type of service provided, and as a consequence only a general indication can be given here. Sleeping rooms rent from \$13 to \$20 a month. Apartment accommodations run from \$14 to \$25 per month per student. Board and room are available at from \$50 to \$65 a month.

Rates for on-campus housing accommodations, except Wymount Village, are on an annual basis. Payment of the charges may be made quarterly or by convenient installments. Board and room charges are \$150.00 per quarter except for single rooms, which are slightly higher. Costs for apartment-type facilities for single women students are \$65 per quarter in Heritage Halls and \$45 per quarter in the cooperative homes. Wymount Village apartments for married students are rented on a monthly basis, the maximum rent being \$36.50.

Students should expect to be required to make rental payments in advance. In the on-campus housing these rates and dates payable are clearly spelled out to enable students to know specifically what is expected and when.

## RENTAL AGREEMENTS

Students planning to live in either on-campus housing or off-campus housing may expect to sign a rental agreement for the accommodations they expect to occupy. Students should be prepared to live by the terms of these agreements once they have signed them. Many misunderstandings and losses can be avoided by students if they will read and familiarize themselves with the terms of the agreement before signing.

**A Word of Caution.** Housing is such an important part of the total experience of the student at the University that thoughtful consideration should be given in advance to the type of housing desired before entering into the rental agreement. Further, to avoid discomfiture and possible loss of money, students should be sure that the accommodations under consideration have been approved by the University.

## FOOD SERVICE

Regular meal service is provided in the Allen and Wymount Residence Halls for men and in the Knight-Mangum and Knight Residence Halls for women. The University also operates a cafeteria and snack bar in the downstairs area of the Joseph Smith Building. The cafeteria serves three meals a day, and the snack bar is open throughout the day and on into the evening. Costs of meals are kept as low as possible, consistent with sound operating management.

## Motion Picture Production

The motion picture production department is a program to produce the documentary, historical, and training films for use in the Church and in schools. A correlated program with drama, music, art, writing, and all creative departments on campus will be used to produce films for instruction, television, and public relations.

## Traffic and Security

The Security Office is located in the south end of the Press Building. One of its functions is directing campus traffic and parking. Students are required to register their motor vehicles with the Traffic Department immediately when they enroll in school. They must re-register at the beginning of each school year and obtain a parking permit if they intend to park on campus. The fee for parking on campus is \$2.00 a quarter or \$5.00 per year. It is the students' responsibility to notify the Traffic Department of any change of vehicles or license numbers.

The Security Office also serves as a protective agency to faculty and students, maintains liaison with the local police, and investigates and prosecutes thefts and other violations of law occurring on campus. Any information regarding criminal matters should be promptly reported to the Security Office.

## Student Organizations

Student activities are organized in such a way as to offer maximum opportunity for training in leadership and self-government and to provide a well-balanced program of individual and group development. Numerous student organizations have been set up to realize effectively such an objective. All student or-

ganizations on the campus conduct their affairs in accordance with a basic philosophy designed "to provide for a broad program of social, cultural, and recreational opportunities in which students are encouraged to participate." Membership is open to students who qualify and remain qualified according to the rules and regulations set up by each organization. All students are urged to become affiliated with some group and thereby derive the benefits that only group experiences can bring. In order to coordinate organizational activity, to eliminate duplication of effort, and to lend continuity from year to year, supervision of student organizations is provided by the Dean of Students through the office of the Coordinator of Student Organizations.

**Associated Students.** This organization is composed of all students who attend Brigham Young University and is presided over by officers elected by them. It seeks to develop interest on the part of every student in all those activities which contribute to a more democratic "Y" spirit and to provide opportunities for all students to participate in a well-rounded program of out-of-class activities. Through this organization, student traditions are kept alive and all interclass and intercollegiate activities are encouraged and unified. Social, forensic, dramatic, and musical activities are fostered under its management, and through it the students publish periodicals which include the "Universe" (semi-weekly), the "Wye Magazine," the Student Directory, and the University yearbook, the "Banyan." The organization also functions as an auxiliary of University discipline through the activities of the Honor Council and the Inter-Organizational Council Penal Court.

**Associated Men.** All men students registered are members of the Associated Men. The organization is designed to promote specific interests of "Y" men and to foster a wholesome masculine atmosphere on the campus. The Executive Council, consisting of three student leaders and a faculty counselor, supplemented by the twelve members of the "Y" men's council, forms the governing group.

**Associated Women.** This is an organization comprising all women registered in the University. Its purpose is to aid and foster all women's activities. This organization is advised by the Counselor for Women and is a member of the Western Division of the National Organization of Associated Women Students, which includes most of the universities and colleges in the United States.

**Class Organizations.** Members of the four classes and the Graduate School are organized for the purpose of developing common interests and class spirit as the class proceeds through the University and into the Alumni Association. Meetings of the classes are held periodically with a limited number of social functions planned by class officers under the direction of the Student Legislative Council.

**Executive Council.** This council consists of the President, First

Vice-President, Second Vice-President, Secretary-Historian, and Business Manager of the student body.

**Legislative Council.** This is a legislative body consisting of representatives from the entire student body, representatives from the classes, representatives from clubs, and representatives of student activities. The Council considers student body problems and initiates action for the welfare of the student body.

**Inter-Organizational Council.** An organization composed of representatives from student organizations to help govern organization activities. It derives its authority from the Executive Council.

**Honor Council.** A group of eleven students appointed and directed by the Legislative Council, functioning as a judicial body with sub-committees to promote the honor system.

## Student Publications

Under the supervision of the Student Publications Committee, composed of both student and faculty representatives, four publications are sponsored in order to serve the University and its students and to give opportunity for student expression and development through publications activities.

**Newspaper.** The *Brigham Young Universe* is published semi-weekly during Autumn, Winter, and Spring quarters and weekly during the Summer quarter. Opportunity is given students for valuable experience in news writing, editing, photography, photo-engraving, and advertising. Editorial and business offices are in Room 144, Clark Student Service Center.

**Yearbook.** Named for the oriental tree which symbolizes the widening friendships formed on the campus, the *Banyan* is the students' photographic and artistic record of each year's activities. Portraits of all students and faculty members are included without charge to the individuals. Editorial and business offices are in Room 143, Clark Student Service Center.

**Magazine.** The *Wye* magazine, published quarterly, contains student-written poetry, stories, and non-fiction. Several awards are given for the best art work, photography, and writing published. Offices are in Room 147, Clark Student Service Center.

**Directory.** An annual directory of Brigham Young University students and faculty is published in the Autumn quarter. Compilation of the directory material and sale of copies is sponsored by White Key, women's honorary service organization.

## Professional and Departmental Organizations

The University encourages organizations which have the specific purpose of bringing together persons of similar scholastic and professional interests and of rendering their work more pleasurable and profitable. Each group fosters the activities of

the department to which it is allied. Eligibility requirements are those of departmental affiliation and general scholarship as determined by the individual organizations. Fees are reduced to a minimum. Each organization has a faculty sponsor.

**A Cappella Choir.** An organization to stimulate and promote the development and appreciation of the art of a-cappella singing and to explore the field of unaccompanied choral music.

**Agriculture Club.** An organization to promote fellowship and service and to provide a source of education for agriculture students.

**Air Force R.O.T.C. Sponsor Corps.** An organization sponsored by the Corps of Cadets, but having no official military status. Its purpose is to promote citizenship and patriotism and to develop a better understanding of the A.F.R.O.T.C. mission on the Brigham Young University campus. The Corps of Sponsors is trained in military marching drill.

**Alpha Epsilon Rho.** The purpose of this organization is to encourage and recognize outstanding radio achievement among college students of high scholastic standing.

**Arnold Air Society.** An organization composed of selected students enrolled in the advanced course of the AFROTC unit. This group is concerned with furthering the purpose, mission, tradition, and concept of the United States Air Forces as a means of national defense; with promoting American citizenship; and with creating a close and more efficient relationship among the Air Reserve Officers Training Corps cadets. Meetings are held twice a month.

**R.O.T.C. Chorus.** The objectives of the A.F.R.O.T.C. Chorus are 1. To create morale in the Cadet Unit. 2. To represent BYU and the Air Force. Rehearsals are held daily. Any cadet may audition for membership.

**R.O.T.C. Band.** This band is the official marching band for the University. It represents the school during half-time activities in football games and at many other student activities. It also provides marching music for the A.F.R.O.T.C. cadets. The members are on call for rehearsal at any time, but usually practice once each week. Any A.F.R.O.T.C. member who plays an instrument is eligible for auditioning.

**Association for Childhood Education International.** An organization whose purpose is to work for the education and well-being of children, to promote desirable conditions, programs, and practices in schools, to raise the standard of preparation, and to encourage continued professional growth of teachers and leaders in education.

**Alpha Lambda Delta.** An organization to promote intelligent living and a high standard of learning and to encourage superior scholastic attainment among freshmen women.

**Student Affiliates of the American Chemical Society.** The



Brigham Young University chapter of Student Affiliates of the American Chemical Society consists of those students in good standing who have completed at least two quarters' work at the scholastic level set for obtaining a degree in chemistry or chemical engineering. The object of this chapter is to enable students to become better acquainted, to secure the intellectual stimulation that arises from professional association, to secure experience in preparing and presenting technical material before chemical audiences, to foster a professional spirit among the members, and to instil a professional pride in chemistry and chemical engineering.

**Bench and Bar.** An organization of the pre-legal students of Brigham Young University whose purpose is to improve pre-legal education, solve individual problems, and further understanding of law and its related agencies.

**Beta Beta Beta.** An international honorary biological fraternity which emphasizes a three-fold program: sound scholarship, dissemination of scientific knowledge, and promptness in undertaking biological research. All junior and senior students having twenty-four hours of biological science credit are eligible for membership.

**Beta Sigma.** An organization of Brigham Young University students for the purpose of promoting and maintaining interest in the science of bacteriology, to further the study of, and research in, bacteriology and allied fields, and to aid in forming a close relationship between faculty members, professional workers, and students of microbiology.

**Band Social Organization.** An organization comprised of members of the University Bands for the purpose of cultural, educational, and social development.

**Forensics Council.** Since Latter-day Saint students do so much public speaking, forensic activities at Brigham Young University aim to reach the entire student body regardless of field. All students may enter any or all forensic activities, which include extemporaneous speaking, impromptu speaking, oratory, debate, discussion, student legislature, radio speaking, and oral interpretation of poetry and prose. Opportunities for all students to improve their speaking skills are made each quarter. These include Forensic Week, third week Fall Quarter; Heber J. Grant Oratorical Contest, Thanksgiving week; Junior Varsity Forensic Tournament, second week Winter Quarter; Rotary Oratorical Contest, mid-winter; Delta Phi Extemporaneous Speaking Contest, early Spring Quarter; Student Legislature, early May. From these campus contests come the people who represent Brigham Young at intercollegiate meets throughout the West.

**French Club.** The purpose of this organization is to introduce students to France and her people through special programs designed to evoke an appreciation for France, her history, her cultural contributions and her citizens.

**Future Teachers of America.** An organization for education majors or future teachers. Members hold full membership with the National Education Association, as do practicing teachers, and are eligible for the Utah teachers' life and health insurance program.

**Gamma Phi Omicron.** An organization of the advanced students majoring in some phase of home economics. Its purpose is to develop culture and scholarship among its members and to lend its aid in establishing better homes and community life.

**German Club.** The purpose of this organization is to introduce students to Germany and her people through special programs designed to evoke an appreciation for Germany, her history, her cultural contributions, and her citizens.

**Home Economics Club.** The club is intended to create a professional spirit among students of home economics. Regular meetings are held at which interesting lectures are given. Special activities are fostered. All girls registered in home economics courses are eligible for membership.

**Horticulture Club.** A student organization to promote fellowship and education and to provide added enjoyment during college life for students interested in horticulture.

**International Relations Club.** The purpose of this club is to stimulate interest in a clearer understanding of international problems and to develop a spirit of world helpfulness and peace. The club is sponsored by the Carnegie Endowment for International Peace.

**Kappa Tau Alpha.** A national society dedicated to the recognition and promotion of scholarship in the field of journalism. The Harrison R. Merrill chapter of the fraternity was chartered at Brigham Young University in 1951 and elects to membership upper division and graduate students of journalism who have excelled in scholarship and service.

**Mask Club.** Those interested in dramatics meet to study the theater arts.

**Orchesis.** An organization whose aim is to reach the greatest perfection possible in modern dance.

**Organ Guild.** This club is intended to advance the appreciation and status of organ music, to raise the standard of efficiency of organists, and to provide members with opportunities to meet for the discussion of professional topics.

**PEM Club.** This club is composed of physical education majors and is organized to stimulate interest in health, physical education, and recreation. It aims to advance the standards of teaching and leadership and to cooperate with local and national health, physical education, and recreation associations.

**Penguin Ski Club.** This organization intends to promote an

active interest in skiing, to develop competitive skiing, and to further fellowship among those participating in the sport.

**Phi Alpha Theta.** A national honorary history fraternity devoted to the following program: the promotion of sound scholarship, the recognition of high scholastic attainment, and the encouragement of association and fellowship among senior and graduate students in the field of history.

**Phi Chi Theta.** A women's national professional sorority. The purposes and objectives for which this sorority is organized are to promote the cause of higher business education and training for women, to foster higher ideals for women in business careers, and to encourage cooperation among women preparing for such careers.

**Phi Delta Kappa.** A professional fraternity for men in education. The chief purpose is to promote free public education as an essential to the development and maintenance of a democracy through the continuing interpretation of the ideals of research, service, and leadership.

**Phi Eta Sigma.** A national scholastic fraternity, organized to promote a higher standard of learning and to encourage high scholastic attainment among freshman men.

**Phi Kappa Phi.** An honor society open to honor students from all departments. Its prime object is to emphasize scholarship and character among college students, to foster the significant purposes for which institutions of higher learning have been founded, and to stimulate mental achievement by recognition through election to membership.

**Pi Sigma Alpha.** An honorary fraternity for outstanding students majoring or minoring in Political Science. First established in 1920, the fraternity has spread until it now has chapters at major universities in the United States and Canada. Its aims are to stimulate scholarship in Political Science, to provide a means of fellowship to its members, and to encourage exchange of information and ideas with students and faculty of other universities. Beta Mu chapter at BYU was established in 1952. It has a diversified program, which includes an annual honorary lecture, awards for contributions to political science, and recognition of unusual student scholarship in some area of governmental study.

**Press Club.** An organization intended to foster the professional development of students in journalism, to maintain high journalistic standards, and to give effective service to the University. Professional newsmen are brought to the campus for lectures and discussions on developments of current interest in the field of journalism.

**Psi Chi.** An organization to foster a better understanding of scientific psychology and to supplement the regular courses of the department by affording the opportunity of discussing certain current problems by advanced students and outside speakers.

**Rodeo Club.** A student organization of those interested in procuring and maintaining rodeo stock for club members to use in practice, to keep performance standards high according to professional rules, and generally to promote participation in rodeos.

**Sigma Alpha Eta.** The purposes of this organization are to stimulate a deeper interest and participation in the problems of the disorders of speech and hearing, to provide opportunities to hear and observe qualified men and women in this profession, and to provide increased social opportunities for speech and hearing students.

**Sigma Gamma Epsilon.** An organization devoted to the advancement of the earth sciences which has for its objectives the scholastic, scientific, and social advancement of its members and the extension of the relationships of friendship and assistance between the universities and scientific schools with recognized standings in the United States and Canada.

**Sigma Nu Omega.** An organization whose membership is comprised of students at Brigham Young University who have selected Nursing as a major. The purpose of this organization is to develop unity among the student nurses through spiritual, educational and social activities; its ultimate purpose is service to others. There are three chapters of Sigma Nu Omega. **Freshman** students comprise Chapter I, which functions on the Brigham Young University campus. All students of the Salt Lake City campus comprise Chapter II. Graduate nurses studying on campus of the Brigham Young University to complete work for the Bachelor of Science degree comprise Chapter III.

**Sigma Pi Sigma.** A national honorary physics society with the following objectives: to stimulate high scholarship, to create an interest in research and the advanced study of physics, and to encourage friendship among the majors in the department.

**Spanish Club.** The purpose of this organization is to introduce students to the Spanish people through special programs designed to evoke an appreciation for Spain, her history, her cultural contributions, and her citizens.

**Studio Art Guild.** An organization formed to help in the development of the artist's eye, mind, and soul; to bring the artist into contact with the things that aid in the aesthetic development of the individual.

**Symphony Orchestra Social.** The objectives of this organization are to continue the development of music appreciation, to incorporate a sense of teamwork and social responsibility, and to provide a means for the development of musicianship.

**Theta Alpha Phi.** A co-educational national dramatics fraternity, the purpose of which is to foster artistic achievement in all of the arts and crafts of the theater.

**Tau Kappa Alpha.** Honorary national debating fraternity.

Those who engage in intercollegiate debating and oratory or who attain marked distinction in forensic activity are eligible to membership.

**University Archaeological Society.** (Campus Chapter.) An organization to promote the scholarship and fellowship of students of archaeology. Activities include field trips and museum projects, as well as lecture and discussion meetings, dealing particularly with discoveries in the field of the archaeology of the scriptures. Members also receive the publications of the Society and of the Department of Archaeology. Membership is open not only to students but to all persons interested in archaeology. (The non-campus membership now extends to many states and foreign countries.)

**Women's Intramural.** This organization provides a variety of activities and social recreation for women students. It is sponsored by the Physical Education Department for Women.

## Service Organizations

**Blue Key.** A national honorary leadership fraternity composed of upperclassmen whose purpose is to foster student body projects of merit and otherwise to render distinctive service to the school whenever called upon.

**Cougarettes.** An organization of freshman women to foster spirit and enthusiasm in connection with athletic activities on the campus of Brigham Young University. The girls are selected for their posture and poise and serve as a marching unit and pep group for performance between halves in athletic events.

**Intercollegiate Knights.** National underclassman's service fraternity. It is designed to promote and foster fellowship, school activities, and traditions, as well as inter-school friendship. Special duties include the lighting of the "Y" on the mountain, from which it derives the name of the Gold "Y" Chapter. Membership is based on activity and scholarship.

**White Key.** Women's honorary organization installed on the campus in 1933. Membership consists of girls outstanding in scholarship, initiative, and ability to serve. Its purpose is to foster University activities of merit and to render service to the associated students.

**Y Calcares.** A service organization for sophomore girls. During spring quarter membership may include freshman girls who have outstanding qualifications in scholarship, participation in school activities, and interest in school affairs. Works with other service organizations on the campus.

## Religious Organizations

**Beta Pi.** An organization for returned women missionaries on the "Y" campus. Its purpose is to provide an opportunity for as-

sociation of women missionaries in cultural, spiritual, and social activities, thereby maintaining the missionary spirit.

**Delta Phi.** A national fraternity whose membership is derived from those who have served as missionaries for more than six months. Its purpose is to foster spiritual activity, high ideals, fellowship, and sociability.

**Lambda Delta Sigma.** A national organization of students having as its objective the fostering of religious, cultural, intellectual, and social ideals. It is sponsored by the Church Department of Education and at present extends to twenty Western colleges. Its membership is open to all college students who desire to maintain Latter-day Saint standards of living. It is directed by an executive council through which all chapters operate. The fraternity has ten chapters now functioning on this campus. They are: Alpha, Chi, Delta, Gamma, Nu, Omega, Phi, Psi, Tau, and Upsilon.

## Social and Geographical Organizations

**Social Units.** Within the program of student organization, provision is made for men's and women's social units. Activities in these organizations are provided in accordance with the basic philosophy of student organizations and are established on the basis of common social interests, friendship, congeniality, and cooperativeness. These organizations furnish numerous opportunities for student participation both individually and in groups. The competitive spirit is fostered in such activities as the Homecoming Parade, the Song Fest, the Snow Carnival.

Men's social units: Argonauts, Athenians, Brickers, Brigadiers, Gamma Tau, Saxons, Tausigs, Templars, Val Hyric, Viking. Women's social units: Alcyone, Cesta Tie, Fidelas, Nautilus of N. L. U., Cami Los, O. S. Trovata, Ri Veda, Val Norn, and To Kalon.

**Geographical Clubs.** These clubs are organized to further social enjoyment and acquaintance among students from the same localities. They are particularly helpful to students during the early quarters of school before these students have found their way into the other social life of the campus. Such clubs are also helpful in maintaining a close bond of interest between the student and his home. Areas represented are: Arizona, Bear Lake, California, Canada, Colorado, Danish, Dixie, Great Lakes, Hawaiian, Idaho, Italian, Kia Ora (New Zealand), Montana, Nevada, Oregon, Tribe of Many Feathers, Salt Lake, Samoan, Square Dance, Texas, Uintah Basin, Washington, Weber, "Y"-oming, and Yankee Clubs.

## Non-Student Organizations

**B. Y. U. Women.** The purpose of this organization is to foster the ideals of the institution and to help furnish recreation and social amusement for the faculty. A woman is eligible for membership in this organization and becomes a member on payment

of dues provided that the time she seeks admission she is either: (1) a present faculty member (a faculty member is one who holds at least the rank of instructor); (2) a past faculty member; (3) a matron; (4) a board member; (5) the wife of a faculty member who has died in the service of the school; (6) the wife of a present faculty or board member.

**The Society of the Sigma Xi.** This is a national organization devoted to the encouragement of research in pure and applied science. The local unit is known as the Brigham Young University Chapter.

Members of the Society of the Sigma Xi on the staff at Brigham Young University organized a Sigma Xi Club in 1935. Since that time it has remained continuously intact, encouraging research and other activities in the various branches of science. A petition for chapter standing was submitted by the local club in 1949. A chapter was granted by the National Society of the Sigma Xi. Formal installation took place October 17, 1950.

Specific local projects include the sponsoring of National Sigma Xi appointed lecturer, the promotion of several lectures by prominent scientists within the unit and from nearby institutions, an annual Sigma Xi lecture by a member of the Chapter, the awarding of an annual medal to an outstanding student for the completion of a research project, and the direction of possible sources of research funds in the interest of pure and applied science.

## Religious Opportunities

Brigham Young University students have excellent opportunities for participation in religious activities. Among the organizations which make this possible are the following:

**Campus Branch and North Campus Branch.** These organizations are branches of East Provo Stake. Their purpose is to make it possible for students who are away from their home wards to get a full and satisfying opportunity to serve and advance in the Church. Sunday School, Priesthood, M.I.A., Relief Society, Genealogy classes, and training for Church leadership are emphasized.

**The Wymount Branch.** This is another branch of East Provo Stake, which is officered and conducted mainly by married students living in the Wymount dormitories. All of the religious opportunities which the Church affords will be found in this branch.

**Church Services.** The various wards in Provo welcome students to their regular Sunday services.

**Sunday Evening Firesides.** Each Sunday evening at 8:30 firesides are held, sponsored by social, religious, and departmental organizations, dormitories, groups representing the various mission fields, etc. These firesides are supervised by the Campus Branch presidency.

## Devotional and Student Assemblies

**Devotional and Student Assemblies.** Throughout the academic year two assemblies are held each week at 9:55 a.m. on Tuesday and Thursday as a part of the regular program of the University.

It is contemplated that during each year all members of the First Presidency and of the Quorum of the Twelve Apostles will address the student body in the Tuesday devotional assemblies. The Thursday hour, set aside for outstanding student entertainment, is an important part of student life and should likewise be a definite part of the student's schedule. Interspersed with the student productions are forum assemblies and lyceums featuring noted people from all walks of life.

## Lyceum

Since the first semester of its second academic year, the University has brought distinguished men and women in arts and letters to its students. During the 1954 Summer Quarter and the 1954-55 season, the following have appeared or are scheduled to appear:

Paul Badura-Skoda .....	Pianist
David Bar-Illan .....	Pianist
A. S. Barr (summer) .....	Lecturer
B.Y.U. Symphony Orchestra, with Carl Fuerstner, piano soloist	
Leslie Chabay (summer) .....	Tenor
Ethan Colton (summer) .....	Lecturer
Columbia Bel Canto Trio, Pierette Alarie, Leopold Sinoneau and Theodor Uppman .....	Vocal Ensemble
Concordia College Choir, Paul J. Christiansen, Director	
Jane Darwell (summer) in "Night Must Fall" ....	Guest Actress
Victoria de Los Angeles .....	Soprano of the Metropolitan Opera
Jean Erdman and her dance group (summer)	
Sigmund Romberg Festival, Virginia MacWatters, Nancy Kenyon, William Olvis, Glenn Darwin and Chorus.	
Fernando Germani .....	Organist of the Vatican in Rome
Willard Earl Given (summer) .....	Lecturer
Donald Gramm (summer) .....	Bass-Baritone
Anna Kaskas (summer) .....	Contralto
Jean Madeira .....	Metropolitan Opera Contralto
Mannes-Gimpel-Silva Trio .....	Instrumentalists
Adele Marcus .....	Pianist
Robert McFerrin .....	Metropolitan Opera Baritone
Lawrence E. Morehouse (summer) .....	Lecturer
New Art Wind Quartet .....	Instrumentalists
New York Philharmonic Symphony-Orchestra, Dimitri Mitropoulos conducting, with Grant Johannesen, piano soloist.	
Opera Workshop, two one-act operas: "Sunday Excursion" by Alex Wilder, and "Riders to the Sea" by Ralph Vaughan-Williams. Directed by Don L. Earl (summer)	
Paganini Quartet (summer) —ten concerts—Henri Temianka, Gustave Rosseels, Charles Foidart, Lucien Laporte.	
Josette and Yvette Roman .....	Duo-pianists



Salt Lake Tabernacle Choir, J. Spencer Cornwall conducting, and the B.Y.U. Symphony Orchestra.

Utah Symphony Orchestra, Maurice Abravanel, conductor

Vegh Quartet: Sandor Vegh, Sandor Zoldy, Georges

Janzer, Paul Szabo ..... String ensemble

Robert Weede ..... Baritone

Ormand Weight (summer) ..... Conductor of Clinic Orchestra

Joseph Wolman (summer) ..... Pianist

John Wummer (summer) ..... Flautist

## Alumni Association

Brigham Young University's Alumni Association was organized in 1893 to "promote the general welfare of Brigham Young University."

During the sixty-two years of its existence, it has assisted the University in many ways: the Maeser Memorial Building was built with funds of the Alumni; part of the property on which the upper campus now stands was obtained by the Alumni Association and turned over to the University, and eighty additional acres were purchased by the Church at the suggestion of alumni leaders; a permanent endowment fund was established in 1929 which now exceeds \$31,000; the Student Union Building fund, started during World War II, now exceeds \$90,000 and has grown primarily from contributions of Alumni; the Fieldhouse fund drive was supported by the Alumni Association; funds in cash have been turned over to the University at various times for unrestricted use; and the alumni have played a vital part in stimulating interest in Brigham Young University through contacts with prospective students, etc.

Alumni of the University are located in all forty-eight states, five U.S. territories and possessions, and in twenty-seven foreign countries. Affairs of the Association are governed by an eighteen-member executive committee, headed by a president, two vice-presidents, a treasurer, the president of the Emeritus Club (composed of alumni who were at the University fifty or more years ago), and a full-time Executive Secretary. Members of the Executive Committee are elected by the membership at large, with six being elected each year to serve terms of three years.

Anyone who has attended the University for one quarter or more is a member of the Alumni Association. There are no annual dues or membership drives, except that the Alumni Association solicits contributions for the University's Development Fund. All contributions to this fund are tax-deductible and entitle the donor to receive publications of the University and the Alumni Association, including the ALUMNUS MAGAZINE, which is issued eight times each year.

Homecoming, in the fall, and Alumni Day, during Commencement Week, are the two major events of the year on campus for alumni. Periodic reunions of all graduating classes are held on these two days. Meetings are also held throughout the country by alumni living in local areas.

The Alumni Association maintains permanent records of all former students of the University and a full-time office staff on the campus. If the current address or other information is needed about a former student, correspondence should be addressed to the Alumni Office. Alumni visiting the campus are invited to visit the Alumni Office and to make it their headquarters while in the area.

The Alumni Association is a member of the American Alumni Council, an organization composed of alumni associations of all the major universities and colleges in the United States, Canada, and Mexico.

On June 4, 1929, the Alumni Association initiated a permanent endowment fund for the University. Generous contributions and subscriptions were made at this alumni reunion.

# General List of Courses

Accounting  
 Agricultural Economics  
 Agronomy  
 Air Science  
 Animal Husbandry  
 Archaeology  
 Art  
 Bacteriology  
 Botany  
 Business Management  
 Chemistry  
 Economics  
 Education: Instruction  
 Educational Administration  
 Educational Research and Services  
 Educational Values and Programs  
 Engineering Sciences  
 English  
 Family Living:  
     Clothing and Textiles  
     Economics and Management of the Home  
     Food and Nutrition  
     Homemaking Education  
     Housing and Design  
     Human Development and Family Relationships  
 Finance and Banking  
 Geography  
 Geology  
 Health Education and Safety  
 History  
 Horticulture and Horticultural Specialties  
 Industrial Arts and Drawing  
 Journalism  
 Library Science  
 Marketing  
 Mathematics  
 Modern and Classical Languages  
 Music  
 Nursing  
 Physical Education  
 Physics  
 Political Science  
 Psychology  
 Recreation  
 Religion  
 Secretarial Training  
 Sociology  
 Speech and Dramatic Arts  
 Zoology and Entomology

## Accounting

Associate Professors: R. J. Smith\*, Lowe.

Assistant Professors: H. V. Andersen, J. T. Bentley (chairman, 167N), Crandall.

Instructors: Brough, Hawkins, McIff, H. N. McKnight, Squire, White.

The courses in accounting are designed to provide the major with a background which will enable him to go directly into a position in his area of training. Preparation to go into the following areas is available by selection of courses offered: (1) general accounting, (2) management accounting and controllership, (3) cost accounting, and (4) public accounting. Training in income tax is helpful or necessary in each of these areas; some students may wish to specialize in income tax accounting.

Besides serving the major in the department, the program in accounting is designed to supplement and enrich the background of students in other areas so as to enable them to understand the accounting problems present in business situations of all kinds.

In order that all students who plan to be graduated with major in one of the five departments of Accounting, Business Management, Economics, Finance and Banking, and Marketing may have a common background of basic information and tools to facilitate their advanced work, they are required to take the core courses listed below. These courses form a basic training normally to be completed during the first two years of college work and before the student is admitted to a major department. Students in the College of Commerce will be counseled during this program by members of the staff selected by the office of the Dean of the College of Commerce.

Accounting 1 and 2	10 hours
Business Management 35	5 hours
Business Management 75	5 hours
Economics 1	5 hours
Psychology 11 or substitute approved by counselor	5 hours

The courses in Economics and Psychology listed above apply toward the University general education requirement in social science. In addition to the above courses, it is recommended that many students in these departments will be able to fill the American History and Government requirement best by taking Economics 74 and Political Science 10.

In addition to the above courses, students majoring in this department are required to take Accounting 149, 150, 151, 152; Business Management 130; Economics 145; Marketing 107; Finance and Banking 151, 157, 158, 159.

Recommended courses: Accounting 26, 125, 188, 194; Marketing 170 or 171, Secretarial Training 31.

Accounting is one of the subjects comprising the composite majors in business designed for prospective teachers. (See page 155.)

### Lower Division Courses

1. **Elementary Accounting.** (5) A.W.S. Lectures daily and two two-hour laboratory periods per week. Staff  
An introduction to college accounting. Purpose: preparation to enter business at once, and a foundation for advanced work in accounting.
2. **Elementary Accounting.** (5) A.W.S. Lectures daily and two two-hour laboratory periods per week. Staff  
Continuation of Accounting 1.
26. **Office Machines.** (2) A.W.S. Prerequisite: Accounting 1. Staff  
(See Secretarial Training 26.)

### Upper Division Courses

105. **Accounting Practices.** (4) S. Daily. Prerequisites: Accounting 1, 2. Crandall  
Emphasis on application of accounting principles and practices through the medium of problems and practice sets.
125. **Machine Accounting.** (2) A.W.S. Three hours lecture plus laboratory period per week. Prerequisite: Accounting 1. Brough  
Payroll, financial control and statements, sales analysis, billing, inventory control, and accounts payable applications will be demonstrated. Problems in each of these applications will be assigned to groups in the class.
132. **Business Report Writing.** (3) S. Staff  
(See Business Management 132.)
149. **Cost Accounting.** (5) A.W.S. Prerequisites: Accounting 1, 2. Bentley  
Introduction to methods and principles of cost finding. Specialized methods of handling costs for materials, labor, and overhead expense.
- 150, 151, 152. **Intermediate Accounting.** (5-5-5) A.W.S. Prerequisites: Accounting 1, 2. Staff  
Basic accounting theory applied to going concerns. Adjustments, working papers, statements and statement analysis, cash and receivables, inventories, fixed assets, investments, liabilities, reserves, corporations, application of funds, partnerships, consignments, installment sales, home office and branch accounting.
187. **Municipal and Government Accounting.** (3) S. Prerequisites: Accounting 1, 2, 150, 151. Lowe or Bentley  
Operation and auditing of municipal and government accounts.

188. **Federal and State Taxes.** (3) A.W. Prerequisites: Accounting 1, 2, and preferably 150 or Business Management 120.

Lowe, Andersen, or Bentley

A study of Federal and State tax regulations and solutions to tax problems.

194. **Auditing Theory and Practice.** (5) A.W. Three hours lecture and two two-hour laboratory periods per week. Prerequisites: Accounting 1, 2, 150, 151, 152. Staff

Principles and methods of public accounting. Professional responsibility and conduct, techniques of verification of accounts and financial statements. Audit working papers.

196. **Accounting Internship.** (3) Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to registration** and meets the same requirements made of the graduate students.

280. **Advanced Accounting.** (5) A. Prerequisite: 152. Staff

- 281, 282. **Industrial Internal Auditing.** (3-3) (Not given this year) Prerequisite: 152 or 194 or equivalent. Staff

283. **Internal Auditing for Special Industries.** (3) (Not given this year) Prerequisites: Same as for 281. Staff

288. **Advanced Tax Problems.** (5) S. Prerequisite: 188. Lowe, Andersen, or Bentley

293. **Reading and Conference.** (1-5) A.W.S. Subject to be arranged with instructor. Staff

294. **Advanced Cost Accounting.** (3) S. Bentley

- 296, 297, 298. **C. P. A. Coaching.** (4-4-4) A.W.S. Prerequisites: 149, 152, 194, and the following, which should be taken before or with C.P.A. Coaching: 187, 188, 280. Staff  
Evening sessions.

300. **Thesis for Master's Degree.** Staff

## Agricultural Economics

Professors: Pond (chairman, 129 N), Farnsworth, Symons.

Associate Professors: Corbridge, Nelson.

Assistant Professor: H. V. Andersen.

The following courses are required for a major in Agricultural Economics: Economics 1, 75, 145, 246; Agricultural Economics 20, 25 or 26, 110, 181, 182. Credit for Economics 75, 145, and 246 will apply toward a major in Agricultural Economics.

It is recommended that students majoring in agricultural economics select a minor in either agronomy, animal husbandry, horticulture, or marketing, or at least take the following courses: Agronomy 41 and 102 or 105, Animal Husbandry 7 or 15, and Horticulture 1.

### Lower Division Courses

- 20. Principles of Agricultural Economics.** (5) A.W. Corbridge  
Nelson

A survey of the basic principles of agricultural economics from both the individual and social points of view, including a study of farm management, land use and tenure, agricultural labor problems, farm finance, marketing of agricultural commodities, and the status of agriculture in the national economy.

- 23. Farm Accounting.** (3) W. Corbridge  
Elementary study of basic records needed for most effective farm management; their compilation, interpretation, and use.

- 25. Farm Management.** (3) A.W. Farnsworth  
A general consideration of farm management; with special reference to soils and crop management; types of farming, farm layout, farm capital, equipment, labor, tenancy, farm records, and farm improvement. (See Agronomy 25.)  
Credit will not be granted in this course to students completing Agricultural Economics 26.

- 26. Farm Management.** (3) A.S. Corbridge  
The business of farming, with special reference to feeds and livestock. A study of the organization and operation of the farm to secure maximum returns. (See Animal Husbandry 26.)  
Credit will not be granted in this course to students completing Agricultural Economics 25.

### Upper Division Courses

- 110. Marketing Farm Products.** (3) A. Nelson  
Economic principles, marketing agencies, methods of selling, channels of distribution, market information, current research, and regulations affecting major farm products.

140. **Advanced Farm Management.** (5) W. Prerequisites: Economics 1, Agricultural Economics 25 or 26, or special permission of the instructor. Corbridge  
Practical application of principles of production economics to the organization and operation of the farm business; combination of productive resources, measures of efficiency, farm accounts, financing, contracts, and other factors affecting success.
152. **Law and the Farmer.** (3) S. Andersen  
A study of legal problems with which the farmer is most often concerned. Special attention will be given to the following: acquisition and disposition of farm property either by contract, gift or inheritance; laws and regulations pertaining to gift, estate, income, property, and social security taxes; other legal problems encountered in the operation of the farming enterprise.
156. **Rural Sociology.** (3) A. Symons  
A survey of social conditions in the rural life of America, with special reference to those social processes which are in operation at the present time. (See Sociology 156.)
168. **Agricultural Cooperatives.** (3) S. Nelson  
Organization, financing, management, price policy, membership and public relations. Factors affecting the success of cooperative associations.
169. **Marketing Livestock Products.** (3) W. Nelson  
A study of existing marketing channels and methods of handling livestock products including poultry, dairy and meat animals and their products.
181. **Land Economics.** (3) S. Nelson  
Principles relating to the utilization, tenure, and conservation of land resources.
182. **Agricultural Finance.** (3) S. Corbridge  
A study of agricultural credit, with special reference to existing financial organizations and their relation to agriculture.
191. **Western Land Problems.** (3) (Not given this year.)  
A survey of the outstanding land problems of the western states, particularly those of the Rocky Mountain area. Special class reports by students will be required.
193. **Economic History of Agriculture.** (3) (Not given this year.)  
The development of agriculture from its beginnings in the Old World to the present time. Historical background of agricultural problems.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** grad-



uate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

- |  |           |
|--|-----------|
| <b>292. Governmental Agricultural Policy. (3) S.</b> | Corbridge |
| <b>296. Individual Readings. (Arr.)</b>              | Staff     |
| <b>297. Individual Research. (Arr.)</b>              | Staff     |
| <b>300. Thesis for Master's Degree.</b>              | Staff     |

## Agronomy

Professors: Farnsworth, Martin (emeritus).

Associate Professors: Hallam (chairman, 160B), Ashton.

Instructor: Reimschiessel.

Students majoring in Agronomy may be trained in the following fields: (1) practical scientific farming, (2) government civil service, (3) commercial agricultural positions, (4) graduate study toward the M.S. or Ph.D. degree, (5) agricultural teaching when program is planned in that direction.

Suggested course outlines are given in each of these areas. A minimum of 30 hours is required for a major. The program is so arranged that, if a student desires, AFROTC may be taken with very little change in the schedule.

Students registered or majoring in any one of the agricultural departments, i.e., Agronomy (except those majors who plan to do graduate work in soils), Animal Husbandry, Horticulture, or Landscape Architecture, are required to take the following courses: Agronomy 25, Farm Management; or A.H. 26, Farm Management. Any two of the following courses in Animal Science: A.H. 1, General Animal Husbandry; A.H. 21, Elements of Dairying; A.H. 90, General Poultry. Any two of the following courses in Plant and Soil Science: Agronomy 41, General Soils; Horticulture 1, Principles of Pomology; Landscape Arch. 1, Elementary Landscape Architecture.

The following is a suggested course of study for Agronomy majors who plan to return to the farm.

Freshman Year		Chemistry 8 or 15 ..... 5	
Autumn		Electives ..... 0-2	
Religion .....	2	Total Hrs. ....16-18	
Phys. Ed. ....	1	Spring	
English 1 .....	3		
Mathematics 1 or 11 ....	5		
Chemistry 7 or 14 .....	5		
Electives .....	0-2		
Total Hrs. ....	16-18	Religion .....	2
Winter		Phys. Ed. ....	1
Religion .....	2	Health 1 .....	1
Phys. Ed. ....	1	English 3 .....	3
Mathematics 35 or 12 ....	5	Agronomy 41 .....	4
English 2 .....	3	Botany 1 or	
		Zoology 11 .....	5
		Electives .....	0-2
		Total Hrs. ....	16-18

**Sophomore Year****Autumn**

Religion .....	2
Sociology 11 or Economics 1 .....	5
Agronomy 1 .....	2
Agronomy 20 .....	3
Bacteriology 21 .....	4
Electives .....	0-2

Total Hrs. ....16-18

**Winter**

Religion .....	2
History 70 .....	5
Agricultural Economics 23 .....	3
Agronomy 25 .....	3
Electives .....	3-6

Total Hrs. ....16-19

**Spring**

Religion .....	2
English 4 or 31 .....	3
Agronomy 22 .....	3
Geology 1 .....	5
Electives .....	3-6

Total Hrs. ....16-19

**Junior Year****Autumn**

Religion (U.D.) .....	2
Agronomy 102 .....	3
Electives .....	11-14

Total Hrs. ....16-19

**Winter**

Religion (U.D.) .....	2
Botany 140 .....	5
English .....	3
Electives .....	6-9

Total Hrs. ....16-19

**Spring**

Religion (U.D.) .....	2
Agronomy 107 .....	3
English .....	3
Electives .....	8-11

Total Hrs. ....16-19

**Senior Year****Autumn**

Religion (U.D.) .....	2
Agronomy 105 .....	5
Agronomy 196 .....	1
Electives .....	8-11

Total Hrs. ....16-19

**Winter**

Religion (U.D.) .....	2
Agronomy 101 .....	3
Agronomy 196 .....	1
Electives .....	10-13

Total Hrs. ....16-19

**Spring**

Religion (U.D.) .....	2
Agronomy 192 .....	3
Agronomy 196 .....	1
Electives .....	8-11

Total Hrs. ....16-19

1. In planning a program for returning to the farm, the student should fill the "electives" from the suggested courses in the following areas depending upon his needs, desires, and the requirements of his minor field.

Agricultural Economics 20, 109, 140, 168, 169, 181, 182, 191.  
Agronomy 173.

Animal Husbandry 1, 7, 15, 21, 22, 90, 107, 154, 171.

Botany 166, 170.

Chemistry 9 or 16.

Horticulture 2, 3, 10, 158, 159.

Industrial Arts 11, 12, 17, 30, 116, 145.

2. Should a student desire to enter the field of government civil service as an agronomist, soil conservationist, soil scientist, reclamationist; the "electives" should be filled with courses from the following:

Agricultural Economics	}	Courses listed as above.
Agronomy 173.		
Animal Husbandry		
Botany 1, 3, 140, 150, 170.		
Chemistry 9 or 16, 21, 22 or 31.		
Geology 1, 11, 12.		
Mathematics 12, 13.		
Graphics 1.		

3. For training for commercial positions, a combination of the above courses in "electives" is suggested.

4. The suggested course of study for agronomy majors who plan to do graduate work for the Ph.D. degree is as follows:

Agronomy 41, 101, 102, 103, 105, 106, 107, 192, 193, 196. ....	32 hrs.
Bacteriology 21 .....	4 hrs.
Botany 1 or Zoology 11 .....	5 hrs.
Botany 140, 150, 170 .....	15 hrs.
Chemistry 14, 15, 16, 31, 151, 152, 153, or 161, 162, 163 .....	37 or 39 hrs.
English 1, 2, 3, 4, or 31 .....	13 hrs.
Geology 1, 12 .....	10 hrs.
German 1, 2, 3 .....	15 hrs.
Health and Phys. Ed. ....	4 hrs.
Mathematics 11, 12, 13, 91, 92, 93 .....	27 hrs.
Physics 41, 42, 43 .....	15 hrs.
Religion (2 hrs. per qtr. in residence) .....	24 hrs.
Soc., Econ., Hist. 70 .....	12 hrs.

## Field Crop Production

### Lower Division Courses

1. **Principles of Crop Production.** (2) A.W.S. Staff  
Crop production principles, soil-plant relationships, crop improvement, tillage, and crop rotations. May be taken concurrently with Agronomy 20, 21 or 22.
2. **Vegetable Production.** (3) S. Ashton  
(See Horticulture 2.)
20. **Cereal Crops.** (3) A. Prerequisite: Agronomy 1. Farnsworth  
Classification, history, and cultural methods involved in the production of cereal crops.

21. **Root and Special Crops.** (3) W. Prerequisite: Agronomy 1. Farnsworth  
Cultural methods, market types, and commercial possibilities of sugar beets, potatoes, etc.
22. **Forage Crops.** (3) S. Prerequisite: Agronomy 1. Farnsworth  
Alfalfa, clovers, grasses, and other forage; meadow and pasture management; silage and soiling crops.
25. **Farm Management.** (3) A.W. Farnsworth  
A consideration of types of farming, farm layout, farm capital, equipment, labor, tenancy, farm records, and farm improvement with emphasis on soil and crop management. (See Agricultural Economics 25.)

### Upper Division Courses

151. **Weeds and Weed Control.** (3) A. Prerequisites: Agronomy 1 and 41. Staff
153. **Advanced Field Crops and Seed Production.** (3) W. Prerequisites: Agronomy 1, 20, 22, 41. Staff  
Problems involved in crop production, crop judging, and seed certification.
155. **Pasture Management.** (3) S. Prerequisites: Agronomy 1, 22, 41, 105. Staff
158. **Weed and Seed Analysis.** (4) A. Reimschiessel  
(See Horticulture 158.)
159. **Plant Breeding.** (3) S. Ashton  
(See Horticulture 159.)
173. **Range Management.** (4) S. Prerequisites: Botany 1, 150. Staff  
Problems associated with the management of range lands, grazing, revegetation, and maintenance of range lands.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

201. **Advanced Plant Breeding.** (3) A. (Not given this year.) Staff
223. **Advanced Range Management.** (1-4) A.W.S. Staff
294. **Seminar.** (1) A.W.S. Martin, Farnsworth, Hallam
295. **Special Problems.** (Arr.) A.W.S. Staff
297. **Research.** (Arr.) A.W.S. Staff

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|---|-------|
| 299. Agricultural Literature. (Arr.) A.W.S. | Staff |
| 300. Thesis for Master's Degree.            | Staff |

## Soils

### Lower Division Course

41. **General Soils.** (4) A.S. Martin  
 An introductory course dealing with the physical, chemical, and microbiological properties of soils. Two lectures. Two two-hour laboratory periods each week.

### Upper Division Courses

101. **Soil Physics.** (3) W. Prerequisites: Agronomy 41, Chemistry 7 or 14, Mathematics 1 or 11. Recommended: Physics 41, 42, 43; Chemistry 15, 16, 21, 22 or 31. Farnsworth  
 A detailed study of the physical composition of soils—sand silt, clay, and organic matter, and their effects upon the air, water, and temperature relationships in the soil. Two lectures, one two-hour laboratory period each week.
102. **Irrigation and Drainage.** (4) A. Prerequisites: Agronomy 41; Mathematics 11. Farnsworth  
 Proper use of irrigation water; irrigation water supply, water measurements; drainage in relation to the irrigation practices; drainage and alkali; drainage systems.
103. **Soil Chemistry.** (3) W. Prerequisites: Chemistry 31, or consent of instructor. Hallam  
 A physico-chemical study of soil colloids.
105. **Soil Fertility.** (5) S. Prerequisites: Agronomy 41, Chemistry 7 or 14. Hallam  
 A study of the underlying principles of soil fertility, soil alkali, soil chemical analysis or soil testing, commercial fertilizers, farm manures, green manures, crop rotations.
106. **Soil and Plant Analysis.** (3) W. Prerequisites: Agronomy 105, Chemistry 21, 22 or 31. Hallam  
 Laboratory chemical analysis of soils and plant materials.
107. **Soil Origin, Classification, Conservation, and Survey.** (3) S. Prerequisites: Agronomy 41, Geology 1. Farnsworth  
 The influence of geologic forces and climatic environment on soil development; classification of soils based upon soil profile characteristics. Methods of soil conservation and soil survey are emphasized. Two lectures, one two-hour laboratory period each week.
110. **Radio Tracer Techniques in Crops and Soils.** (2) W. Prerequisite: senior standing, consent of instructor. Hallam  
 An introduction to the possibilities of tracer techniques in a study of soil fertility; the use and care of radioactive material and measuring devices.

- 114. Soil Microbiology.** (3) A. Prerequisite: Bacteriology 21.  
Hallam  
A lecture course designed to acquaint the student with bacteria in relation to soil fertility. The activity and types of organisms in the Rhizosphere. The biological processes in the soil.
- 115. Soil Microbiology Laboratory.** (2) A. Prerequisites: Agronomy 192; Chemistry 31, or equivalent, or consent of instructor.  
Hallam  
A laboratory course designed to accompany soil microbiology lectures.
- 196. Seminar.** (1) A.W.S. Farnsworth, Hallam, Martin  
Current agronomic literature, agricultural problems. Required of all senior students majoring in agronomy.
- 197. Research and Special Problems.** (1-3) A.W.S. Seniors specializing in Agronomy elect research work from one to three hours. Time and credit to be arranged.  
Farnsworth  
Martin, Hallam
- 198. Agricultural Literature.** A.W.S. Farnsworth,  
Martin, Hallam

Credit and subject matter to be arranged.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- 203. Advanced Soil Physics.** (4) W. Farnsworth
- 205. Physical Chemistry of Soil Formation.** (4) S. Farnsworth
- 291. Advanced Soil Microbiology.** (3) S. Prerequisites: 105; Bacteriology 21. Hallam
- 294. Seminar.** (1) A.W.S. Martin, Farnsworth
- 295. Special Problems.** (Arr.) A.W.S. Staff
- 297. Research.** (Arr.) A.W.S. Staff
- 299. Agricultural Literature.** (Arr.) A.W.S. Staff
- 300. Thesis for Master's Degree.** Staff

## Air Science

Professor: To be appointed (chairman, 156 ENG).

Assistant Professors: Major Bailie, Lt. Col. Blake, Captain Brady, Major Cloward, Major Crawford, Lt. Grindstaff, Lt. Nelson, Major Orchard.

Instructors: M/Sgt. Carter, S/Sgt. Lasater, M/Sgt. Mitchell, T/Sgt. Nielsen, T/Sgt. Schow, T/Sgt. Sirles.

**General.** The Department of Air Science represents the Senior Division of the Air Force Reserve Officers Training Corps program. Four courses are offered consisting of three quarters each. Subjects in Courses I and II are taught two hours per week, and Courses III and IV are taught four hours per week. Upon successful completion of Course IV and of other studies for a degree, the student is offered a reserve commission as Second Lieutenant in the United States Air Force or granted a certificate of completion according to the needs of the Air Force at the time of graduation. Those who are granted certificates of completion will be offered commissions as Second Lieutenants in the United States Air Force only after they have served with one of the armed services for the minimum time required under the Universal Military Training and Service Act of 1951. Present Air Force policy contemplates allowing those receiving certificates of completion to enlist in the Air Force for a two-year period, entering in the grade of Airman 3rd class.

All students who are selected and properly enrolled in the AF ROTC program are deferred from the draft, provided they are within the yearly deferment quota allotted the University. To qualify under this provision, the student must sign an agreement to serve two years active duty as a commissioned officer, if called upon to do so by the Secretary of Defense, and to remain in the reserves for a period of eight years from the anniversary of the receipt of his commission. Further, he must satisfactorily complete the University academic requirements and the AFROTC program.

Deferment is not automatic, but is granted to eligible students who personally request deferment at the student records office of the Air Science Department.

That portion of the basic course may be waived by the PAS for prior active military service which will help the student complete the AFROTC program at the same time he graduates from the university.

The Air Force ROTC program is divided into two separate parts, referred to as "basic" and "advanced." Basic courses consist of Courses I and II, or freshman and sophomore level work; the advanced courses consist of Courses III and IV, or junior and senior level work. A student must complete either the basic or the advanced course before receiving the degree he is seeking at the time he enters the course. He may not commence part of either



as an undergraduate and complete the same as a graduate student.

All students enrolled in Air Science are assigned positions in the Cadet Corps organization and are scheduled for a two-hour leadership laboratory period each week. Course IV students and outstanding Course III students hold cadet commissions and are responsible for the leadership training of other students. Course III students hold cadet non-commissioned officer rank, while Course II and Course I students may be promoted in airman ranks as their leadership ability is demonstrated.

If Air Force ROTC requirements are completed before graduation, the student will continue to be deferred from the draft until he is graduated. He must graduate within one academic year after completing the AFROTC program.

**Allowances.** At the present time, students who are properly enrolled in the advanced courses (III and IV) receive monetary allowances which amount to approximately ninety cents (\$.90) per day. This does not affect allowances due from the G. I. Bill of Rights. In addition, uniforms, texts, and equipment are furnished to all students properly enrolled.

**Additional Training.** As a prerequisite to receiving a commission, all students must attend a six-weeks Summer Camp. The summer course normally is attended between Courses III and IV. Seventy-five dollars (\$75.00) per month, plus travel allowances, medical care, food, and clothing are provided the student.

### Lower Division Courses

**10, 11, 12. National Defense and the Air Force. (2-2-2) A.W.S. Staff**

Basic course designed to introduce the study of aviation, fundamentals of global geography, factors of world power, and the nation's defense organization.

**20, 21, 22. Elements of Aerial Warfare. (2-2-2) A.W.S. Staff**

The purpose, process, and primary elements of aerial warfare: targets, weapons, aircraft, the air-ocean, bases, and people; purpose and provisions of the USAF Officer Career Program; survey of occupational fields open to officers.

### Upper Division Courses

(Students are selected for upper division work by a Board of Officers under the direction of the Professor of Air Science.)

**101, 102, 103. Applied Air Science and Techniques. (3-3-3) A.W.S. Staff**

Command and staff concepts; problem-solving techniques; communications processes; principles and techniques of learning and teaching; Air Force correspondence and publications; military law, courts, and boards; applied air science, including aerial navigation and weather; and functions of the Air Force base.

- 112, 113, 114. Applied Air Science and Techniques. (3-3-3) A.  
W.S. Staff

Principles of leadership and management, military career guidance, military aspects of world political geography, military aviation and the art of war, and briefing for commissioned service.

## Animal Husbandry

Professor: Morris (chairman, 173B).

Associate Professors: Corbridge, Richards.

Assistant Professors: M. M. Nicholes, Shumway\*.

The department of Animal Husbandry provides courses in three phases of animal production: (1) Animal Husbandry, which includes swine, sheep, beef cattle, and horses; (2) Dairy Husbandry; (3) Poultry Husbandry. A student majoring in Animal Husbandry may choose his courses from any one or a combination of these fields.

Students registered or majoring in any one of the Agricultural departments, i.e., Agronomy, Animal Husbandry, Horticulture or Landscape Architecture, are required to take the following courses for graduation:

Any two of the following courses in Animal Science: A.H. 1, General Animal Husbandry; A.H. 21, Elements of Dairying; A.H. 90, General Poultry. Any two of the following courses in Horticulture and Soil Science: Agron. 41, General Soils; Hort. 1, Principles of Pomology; Landscape 1, Elem. of Landscaping. One of the following: Agronomy 25, Farm Management; or A.H. 26, Farm Management.

It is suggested that group requirements be filled, that a minor be chosen, and that a few courses in it be elected during the first two years. Minors in Agronomy, Agricultural Economics, and Farm Mechanics fit in particularly well for those who plan to return to farm work or in practical livestock work.

A suggested course for the first two years only is outlined. The course to be taken during the junior and senior year will depend largely on (1) the type of livestock in which the student is interested, and (2) the type of employment for which he is preparing. Five main outlets for Animal Husbandry majors are listed below. Detailed plans for preparation for each of these can be secured from the department chairman.

1. Operating own or family farms and ranches
2. Field service work
  - a. Feed companies
  - b. Milk and dairy processing plants
  - c. Veterinary, livestock, and poultry supply houses
  - d. Fertilizer companies
  - e. Farm machinery
3. Livestock and herd managers
4. Livestock marketing
  - a. Stock yards
  - b. Livestock buyers
5. Pre-veterinary
6. Advanced study

The schedule listed below is a basic outline for all Animal Husbandry majors. During the first two years the following courses are required: Animal Husbandry 5, 7, 10, 11, 15, and 32. Animal Husbandry 174, 175, 176 are required of all majors during the senior year.

Freshman Year		Sophomore Year	
Autumn		Autumn	
A.H. 7 .....	5	A.H. 21 or A.H. 90 ....	4
Zoology 11 .....	5	Chemistry 7 .....	5
English 1 .....	3	A.H. 10 .....	5
Religion .....	2	Religion .....	2
Phys. Ed. ....	1	ROTC or El. ....	2
ROTC or El. ....	2		
Winter		Winter	
A.H. 15 .....	5	A.H. 11 .....	5
English 2 .....	3	Chemistry 8 .....	5
Religion .....	2	Religion .....	2
Hort. 1 or		Ag. Econ 26 .....	3
Lands. 1 .....	3	ROTC or El. ....	2-3
Phys. Ed. ....	1		
Health .....	1		
ROTC or El. ....	2-3		
Spring		Spring	
A.H. 1 .....	4	A.H. 32 .....	4
English 3 .....	3	Chemistry 9 .....	5
Religion .....	2	Agron. 41 .....	4
Phys. Ed. ....	1	Religion .....	2
A.H. 5 or A.H. 6 .....	3	ROTC or El. ....	2-3
ROTC or El. ....	3-5		

## General Animal Husbandry

### Lower Division Courses

1. **General Animal Husbandry.** (3) A.S. Staff  
A course designed to familiarize the student with all phases of livestock production.
2. **Breeds of Livestock.** (5) W. (Not given this year.) Richards  
A study of the breeds of livestock with emphasis on the conditions under which the breeds were developed and their adaptability to western conditions.
5. **Livestock Judging and Selection.** (3) S. Staff  
A study of animal types and their relation to the functions of animals. Field trips to the University Farm and nearby farms will be made. Emphasis will be on practice in selection and judging of animals.
7. **Feeds and Feeding.** (5) A.W. Morris  
Principles of nutrition and their application to all types of farm animals.

- 10. Veterinary Physiology and Anatomy.** (5) A. Prerequisite: Zoology 11. Nicholes  
Physiology and anatomy of farm animals.
- 11. Veterinary Science.** (5) W. Prerequisite: Animal Husbandry 10. Nicholes  
A study of the causes, prevention, and practical treatment of common diseases of farm animals.
- 12. Veterinary Clinic.** (3) S. Three lectures and one special laboratory period arranged. Prerequisites: Animal Husbandry 10, 11. Nicholes  
Diagnosis, treatments, and laboratory and field experience in animal hygiene.
- 15. Fundamentals of Animal Breeding.** (5) A.W. Richards  
A study of the principles involved in breeding farm animals, including physiology of reproduction, heredity and variation, selection and systems of breeding.
- 26. Principles of Farm Management.** (3) A.S. Corbridge  
(See Agricultural Economics 26.)
- 32. Fitting and Showing Livestock.** (4) S. Three three-hour laboratory periods per week. Richards  
Each student will be assigned an animal to fit and show at one of the spring shows and the Campus Livestock show.

### Upper Division Courses

- 105. Advanced Judging.** (3) A. Prerequisite: Animal Husbandry 5. Staff  
Advanced work in livestock judging. Collegiate team will be picked from this class.
- 107. Advanced Feeding.** (4) (Not given this year.) Three lectures and one three-hour laboratory period per week. Prerequisite: Animal Husbandry 7. Shumway
- 115. Advanced Animal Breeding.** (3) S. Prerequisites: Animal Husbandry 15. Richards  
Advanced work in livestock breeding.
- 150. Horse Husbandry.** (3) S. Nicholes  
A brief study of breeds of horses, with emphasis on feeding, training, and management.
- 154. Beef Production.** (4) A. Three lectures and one three-hour laboratory period per week. Two Saturday field trips, including a trip to Ogden Livestock Show. Prerequisites: Animal Husbandry 7, 15. Richards  
The problems of breeding, feeding, and management of range cattle, feeder cattle, and purebreds will be studied.
- 155. Sheep Production.** (3) S. Prerequisites: Animal Husbandry 7, 15. Staff  
Feeding, care, and management of farm and range sheep.

156. **Swine Production.** (3) S. Prerequisites: Animal Husbandry 7, 15. Staff  
Breeding, feeding, and management of swine on western farms.
160. **Meats and Meat Preparation.** (3) W. M. Nicholes
173. **Range Management** (4) S.  
(See Agronomy 173.)
174. **Current Problems in Animal Husbandry.** (2) A. Staff  
A brief review of current experimental work with livestock.
175. **Animal Husbandry Seminar.** (1) W. Staff
176. **Animal Husbandry Survey.** (1) S. Staff  
Special lectures by livestock specialists with emphasis on employment opportunities.
182. **Animal Husbandry Research and Problems.** (1-5) Staff  
Students will be expected to outline and complete a research problem in some phase of Animal Husbandry.
184. **Animal Husbandry Practices.** (Arr.) A.W.S. Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

201. **Special Problems in Animal Breeding.** (1-5) A.W.S. Richards
207. **Animal Nutrition.** (3) S. Staff
211. **Special Problems in Animal Nutrition.** (1-5) A.W.S. Staff
230. **Animal Disease Research.** (1-5) Arr. Nicholes
260. **Experimental Methods in Livestock Work.** (3) W. Richards

### Dairy Husbandry

#### Lower Division Courses

6. **Dairy Judging and Selection.** (3) S. Two three-hour laboratory periods per week. Staff
21. **Elements of Dairying.** (4) Three lectures and one three-hour laboratory period per week. Richards  
General principles of breeding, feeding, and management of dairy cattle.
22. **Cow Testing.** (2) A.S. (Not given this year.) Richards  
Instruction and practice in record keeping and butterfat testing.

## Upper Division Courses

- 110. Milk and Milk Processing.** (5) (Not given this year.)  
 Modern methods of producing, grading, and processing dairy products. Shumway
- 116. Pedigree and Herd Book Study.** (2) W. Prerequisite: Animal Husbandry 15. Richards  
 Interpretation of pedigrees and research in herd books of the major breeds of livestock.
- 165. Artificial Insemination.** (3) S. Prerequisite: Animal Husbandry 15. Richards  
 Methods and techniques of artificial breeding will be studied, accompanied by laboratory work.
- 171. Dairy Production.** (4) W. Three lectures and one three-hour laboratory period per week. Richards  
 Advanced work in feeding, breeding, and milk secretion.
- 184. Animal Husbandry Practices.** (Arr.) A.W.S. Staff

## Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

- 220. Problems in Dairy Research.** (1-5) A.W.S. Staff
- 271. Secretion of Milk.** (3) S. Staff

## Poultry Husbandry

## Lower Division Courses

- 90. General Poultry.** (4) A.W. Three lectures and one two-hour laboratory per week. Morris  
 A general course in Poultry Husbandry designed to acquaint the student with the general problems of poultry breeding, feeding, housing, and management, and the possibilities and limitations of the industry.
- 91. Poultry Practices.** (1-2) A.W.S. Prerequisite: Animal Husbandry 90. Morris  
 Practical experience in growing and caring for a brood of chicks from day old to twelve weeks. This experience will be gained at the University Poultry Laboratory. The amount of credit will vary with the size of the units and the number of birds grown.

**Upper Division Courses**

189. **Advanced Poultry Practices.** (1-3) A.W.S. Prerequisite: Animal Husbandry 90. Morris  
Actual practice and experience in caring for and managing laying hens and broilers and in the marketing of eggs and poultry; candling, grading, and caring for market eggs; killing and dressing poultry, fowl, and turkeys.
190. **Poultry Management.** (3) W. Two lectures and one two-hour laboratory per week. Prerequisite: Animal Husbandry 90. Morris  
The management and business phases of poultry production. Problems involved in managing laying flocks, broilers, and replacement pullets. Costs of starting the business and operational costs. Problems of setting up, arranging, and operating a poultry farm. Visit to nearby farms.
191. **Turkey Management.** (3) S. Two lectures and one two-hour laboratory period per week. Morris  
The principles, practices, and problems of turkey production, including brooding, feeding, growing, and marketing.
193. **Poultry Marketing.** (3) (Not given this year.) One one-hour lecture and one four-hour laboratory per week. Morris  
Proper care of eggs; candling, grading, and processing eggs for market; killing, grading, processing, and packaging of chickens and turkeys; visits to processing plants.
194. **Poultry Feeding.** (3) A. Two hours lecture and one two-hour laboratory period per week. Prerequisite: Animal Husbandry 90. Morris  
Applying the principles of nutrition to all types of poultry. Feed formulation and feed ingredients. Nutritional requirements of chicks, broilers, poults, laying hens and turkeys. Visit to nearby feed mills.
196. **Incubation and Brooding.** (3) S. Two lectures and one two-hour laboratory period per week. Prerequisite: Animal Husbandry 90. Morris  
The principles and problems involved in incubating chicks and poults. Feeding, managing, and caring for chicks, poults, and broilers.
197. **Selecting and Judging Poultry.** (3) (Not given this year.) One one-hour lecture and one four-hour laboratory period per week. Prerequisite: Animal Husbandry 90. Morris  
The selecting and judging of hens for egg production and for the breeding flock. Care and management of breeders. Judging exhibition birds and poultry show management.
198. **Poultry Seminar.** (1) Arr. Morris  
A survey and reporting of current research and problems in poultry husbandry.
199. **Poultry Research and Problems.** (1-5) Arr. Morris  
For advanced students who might want to do graduate and research work. The outlining and conducting of a research problem.



## Archaeology

Associate Professor: Jakeman (chairman, 203ESC).

Assistant Professor: R. T. Christensen\*.

A major in Archaeology requires the completion of 40 hours of work in this department, including courses 1, 31, 50, 76, 110, 130, 151, 161, and 171. A major in this field will prepare the student for postgraduate specialization in either (1) Old World archaeology and ancient history or (2) American archaeology and anthropology, leading to teaching and/or research and writing in these areas. For fullest preparation, the following courses in other departments are recommended: Geology 1 and 12, Geography 20 and 75, Sociology 11 and 108, History 10 and 100, Speech 1a, English 22, Art 1 and 59, Physics 26, Civil Engineering 11, and Graphics 43, 44, and 45; also a minor of 24 hours in French or German (for specialization in Old World archaeology and ancient history) or Spanish (for specialization in American archaeology and anthropology).

A minor in Archaeology requires the completion of 20 hours in this field including courses 1, 31, 50, 76, 110, and 130.

Credit in Religion may be obtained for courses 110 and 130. (See Archaeology in the Division of Religion.)

In this department, courses not offered this year will be given the following year.

### Lower Division Courses

**1. Introduction to Archaeology.** (4) A.W.S. (GER-HA) Staff

The aims, fields, and major discoveries of archaeology, with a survey of the principal known antiquities and ancient arts. Special attention will be given the important bearing of archaeology on the claims of ancient writings, such as the Hebrew scriptures.

**31. General Prehistoric Archaeology.** (3) W. (†GER-HA) Pre-requisite: Archaeology 1. Christensen

A survey of the findings of archaeology relating to the history of man before the beginning of fully recorded history, in both the Old and New Worlds; and an introduction to early technology, and the methods of interpreting prehistoric archaeological remains.

**50. Races of Man.** (2) S. Recommended: Archaeology 31. Jakeman

A study of the physical types of man, particularly the ancient types revealed and dated by archaeology. Special attention will be given the races of the Bible, and the physical types and problem of origin of the American Indians.

- 76. Cultures of the American Indians.** (2) A.W. (GER-HA) Recommended: Archaeology 50. Christensen

A survey of the native Indian cultures of the New World, in the light of archaeology and the early ethnographic reports; and an introduction to the principles of cultural anthropology as illustrated by the American Indian cultures, helpful to the study of archaeology.

### Upper Division Courses

- 100. Early Prehistoric Archaeology.** (3) A. Prerequisite: Archaeology 31. Christensen

A study and evaluation of the findings of modern archaeological research relating to early human prehistory, or the so-called Old and Middle Stone ages of the Old World and Early Hunting Age of the New.

- 110. General Near Eastern and Biblical Archaeology.** (3) A.W.S. (†GER-HA; †GER-R) Prerequisite: Archaeology 1 or History 10, or consent of instructor. Jakeman, Christensen

A survey of the principal excavations and monuments of archaeology in Mesopotamia, Egypt, Palestine, and other Near Eastern-Biblical lands, contributing to our knowledge of ancient oriental history and civilization. Special attention will be given the important discoveries of archaeology bearing upon the historical claims and geography of the Bible.

- 114. Later Prehistoric Archaeology of Western Asia and the Mediterranean.** (3) S. Prerequisites: Archaeology 31 and 110. Jakeman

The beginnings of civilization in the Near Eastern-Mediterranean region, from the Agricultural Revolution and New Stone Age to the rise of the historic states of the Bronze and Iron ages, with special attention to the findings of archaeology bearing on the important archaeological-historical claims of the Book of Genesis.

- 118. General Classical and Christian Archaeology.** (3) (Not given this year. (†GER-HA) Prerequisite: History 10; recommended: History 104 and 108 and Church History 114. Jakeman

A survey of the historic Graeco-Roman civilization of the Mediterranean, with special attention to the antiquities and excavations illustrating the development of classical architecture and art, and the important discoveries of archaeology illustrating early Christian history.

- 130. Ancient Civilizations of America.** (3) A.W.S. (†GER-HA; †GER-R) Prerequisite: Archaeology 1 or consent of instructor. Jakeman, Christensen

A study of the historical record and geography of the Book of Mormon, giving the claims of this early scripture as to the origins, characteristics, and history of the first civilizations of the New World; and the latest evidence of archaeology bearing upon these claims. (General Book of Mormon archaeology.)

- 135. Archaeology of Mexico and Central America.** (3) (Not given this year.) Prerequisite: Archaeology 130. Jakeman  
The progress of excavation and other archaeological research in Middle America, the region of the ancient civilizations of the Book of Mormon, with special attention to the early "Archaic" period of origins or period of the Book of Mormon. (Archaeology of Book of Mormon lands.)
- 140. Archaeology of South America.** (3) (Not given this year.) Prerequisite: Archaeology 31. Christensen  
The archaeological history of South America, with special attention to the ancient civilizations and traditional history of the Andean region.
- 145. Archaeology of North America.** (3) S. Prerequisite: Archaeology 31. Christensen  
The archaeological history of North America north of central Mexico, with special attention to the prehistoric agricultural peoples of the Southwest and eastern United States.
- 151. Methods of Archaeological Research.** (2) S. Jakeman  
The main steps in archaeological research, with special attention to the first step or definition of problem and to the methods of field research in archaeology or the discovery and excavation of ancient sites.
- 161. Field Archaeology.** (4) (Not given this year.) Prerequisite: Archaeology 151. Two four-hour field periods per week, first five weeks; two lectures and one four-hour laboratory period, remainder of quarter. Christensen  
Student participation in the actual excavation of a prehistoric Indian mound of Utah Valley, and the processing of the excavated material; also practice in the typological classification of archaeological materials and the preparation of the field report.
- 171. Interpretative Archaeology.** (3) W. (Not given this year.) Prerequisite: Archaeology 161. Christensen  
The interpretation of empiric archaeological data as to culture meaning and practice in archaeological ethnography, methods of chronological interpretation, also the historical interpretation of archaeological data and practice in archaeological historiography.
- 184. Seminar.** (2) S. (Not given this year.) Jakeman  
Special attention given to the methods of research in, and teaching of the archaeology of, the Scriptures.
- 191, 192, 193. Special Studies in Archaeology.** (1-3, 1-3, 1-3) A.W.S. Staff  
Guided readings and museum or laboratory work in one or more of the following fields:  
In Old World archaeology: Mesopotamian, Egyptian, Palestinian, Biblical, Aegean, Classical, Christian, Northern European, Indian, Far Eastern, Polynesian.

In American archaeology: Mexican, Central American (northern or Maya), Peruvian, North Andean and Isthmian, Eastern Mound-Area, Southwestern.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

261. **History and Theory of Archaeology.** (2) (Not given this year.) Christensen
221. **Archaeological Surveying.** (2) (Not given this year.) Christensen
231. **Ceramic Typology.** (1) (Not given this year.) Jakeman
250. **Studies in Comparative Stratigraphy: Old World.** (2) A.W.S. Staff
260. **Studies in Comparative Stratigraphy: Americas.** (2) A.W.S. Staff
266. **Early Chronicles of Mexico and Central America.** (1) (Not given this year.) Jakeman
- 271, 272. **Maya Hieroglyphics.** (2-2) (Not given this year.) Jakeman
275. **Seminar in Mesoamerican Archaeology.** (1) S. Staff
285. **Seminar in General Comparative Archaeology.** (1) S. Staff
294. **Library and Museum Research.** (2) A.W.S. Staff
297. **Field Research.** (3, 5, or 8) A.W.S. Staff
300. **Thesis for Master's Degree.** Staff

### Archaeology

(See also courses in Religion.)

## Art

Professors: de Jong, E. M. Jenson, B. F. Larsen (emeritus).

Associate Professor: Andrus (acting chairman, 296E).

Assistant Professors: Gamett, Gunn, Stewart\*, Turner, W. B. Wilson.

Instructors: Boel, Swapp, L. Taylor.

To receive a baccalaureate degree in Art a student must complete the following basic work before taking upper division courses: Drawing (lower division), six hours; Design (lower division), four hours.

In addition to the general requirements listed above, a major in Art must include nine hours in History of Art and 26 hours of upper division work in one of the following areas of specialization:

<b>Commercial Art</b>	
Commercial Art .....	8
Graphics .....	4
Painting .....	4
Drawing .....	2
Water color .....	2
Design .....	2
Photography .....	2
Elective .....	2
<b>Total Hours .....</b>	<b>26</b>

<b>Painting</b>	
Painting .....	8
Crafts .....	2
Drawing .....	2
Graphics .....	2
Design .....	2
Sculpture .....	2
Interior Design .....	2
Elective .....	6
<b>Total Hours .....</b>	<b>26</b>

<b>Graphics</b>	
Graphics .....	8
Crafts .....	2
Drawing .....	2
Interior Design .....	2
Sculpture .....	2
Painting .....	2
Design .....	2
Photography .....	2
Elective .....	4
<b>Total Hours .....</b>	<b>26</b>

<b>Teaching Major</b>	
Crafts .....	6
Graphics .....	2
Painting .....	4

Sculpture .....	2
Commercial Art .....	4
Interior Design .....	2
Art Education .....	3
Elective .....	3
<b>Total Hours .....</b>	<b>26</b>

<b>Interior Design</b>	
Interior Design .....	9
Crafts .....	2
Graphics .....	2
Sculpture .....	2
Water color .....	2
Drawing .....	2
Painting .....	2
Elective .....	5
<b>Total Hours .....</b>	<b>26</b>

<b>Crafts</b>	
Crafts .....	8
Graphics .....	2
Drawing .....	2
Painting .....	2
Sculpture .....	2
Interior Design .....	2
Design .....	2
Elective .....	6
<b>Total Hours .....</b>	<b>26</b>

<b>Sculpture</b>	
Sculpture .....	8
Crafts .....	2
Drawing .....	2
Painting .....	2
Graphics .....	2
Interior Design .....	2
Electives .....	6
<b>Total Hours .....</b>	<b>26</b>

A teaching minor in Art should include:

Drawing (lower division) .....	4	Art Education .....	3
Design (lower division) ..	2	Painting .....	2
History of Art .....	3	Sculpture .....	2
Crafts .....	4	Interior Design .....	2
Commercial Art .....	2	Graphics .....	2
		Total Hours .....	26

### SUGGESTED COURSES FOR MAJORS

	Freshman Year			
	A	W	S	T
Religion .....	2	2	2	6
English 1, 2, 3 ....	3	3	3	9
Phys. Education ..	1	1	1	3
Foreign Language	5	5	5	15
Art 21, 22, 23 ....	2	2	2	6
Art 10, 11, 12 ....	2	2	2	6
Elective .....	2	2	2	6
Total Hrs. ....	17	17	17	51

	Junior Year			
	A	W	S	T
Religion .....	2	2	2	6
Psychology .....	5			5
Botany 1, 10 ....		5	3	8
Art .....	2	2	2	6
Electives .....	7	7	9	23
Total Hrs. ....	16	16	16	48

	Sophomore Year			
	A	W	S	T
Religion .....	2	2	2	6
Foreign Language	5	5		10
Archaeology 1 ....	3			3
History 20, 21 ....		5	5	10
Physics 26 .....	4			4
Geography 20, 21		3	5	8
Health 1 .....	1			1
English .....			3	3
Art History .....	3	3	3	9
Total Hrs. ....	18	18	18	54

	Senior Year			
	A	W	S	T
Religion .....	2	2	2	6
Art .....	7	5	5	17
Electives .....	7	9	9	25
Total Hrs. ....	16	16	16	48

### Lower Division Courses

1. **Introduction to Art.** (2) A.W.S. (GER-HA) Turner  
Recommended for everyone who desires a better understanding of and a greater appreciation for painting, sculpture, architecture, and other graphic and plastic arts.
10. **Theory and Practice of Design.** (2) A.W.S. (GER-HA) Gunn, Staff  
Study of the fundamental principles of art affecting the use of form, color, and texture in structural design and decoration.
11. **Basic Design.** (2) A.W. Staff  
Application of the principles of design in use of plastic and graphic materials.
12. **Color in Design.** (2) W.S. Staff  
Use of color in various media as it relates to other elements of design.
21. **Elementary Drawing.** (2) A.W. (GER-HA) Turner, Stewart, Swapp  
Drawing with pencil; art structure emphasized.

22. **Elementary Figure Drawing.** (2) W.S. (GER-HA) Andrus, Gunn  
Drawing from the model.
23. **Basic Drawing.** (2) S. (GER-HA) Staff  
Composition and representation through considered use of the principles of drawing.
27. **Oil Painting.** (2) A.W.S. (GER-HA) Turner  
An introduction to the use of oil colors as a medium of expression.
33. **Water Color Painting.** (2) A.W.S. (GER-HA) Turner  
Survey and application of the various techniques of water color painting.
39. **Pen Lettering.** (2) A.W.S. Jensen  
Study of basic pen alphabets. (See Marketing 39.)
40. **Brush Lettering.** (2) A.W. Gunn  
The study of brush manipulation and letter structure for display advertising. (See Marketing 40.)
50. **Print Making.** (2) A.W.S. Andrus  
An introduction to woodcut, engraving, etching, lithography, and silk screen.
56. **Sculpture.** (2) A.W.S. Turner  
Modeling and casting.
59. **Ceramics.** (2) A.W.S. (GER-HA) Wilson  
Ceramics and pottery with clay as the basic medium.
63. **Crafts.** (2) A.W.S. (GER-HA) Swapp  
Leather, wood, plastics, and other media used as a basis for creative design.

#### Upper Division Courses

104. **Art History and Appreciation.** (3) A. (GER-HA) Swapp  
Interpretation and classification of masterpieces of architecture, sculpture, graphic arts, ornament, and painting to the end of the eighteenth century.
106. **Aesthetics.** (2) W. (GER-HA) de Jong  
Theoretical and practical criteria of aesthetic values.
107. **Contemporary Art.** (3) W. (GER-HA) Larsen  
The rise and progress of contemporary art in Europe and America.
108. **American Art.** (3) S. (GER-HA) Larsen  
History and evaluation of painting, sculpture, architecture, and industrial arts in America.
110. **Advanced Design.** (3) A. Staff  
A study of art structure as a means for the expression of ideas and emotions.

111. **Mural Design.** (2) W. Andrus  
Principles of design applied to mural decoration.
113. **Home Planning.** (2) A.W. Staff  
Application of the principles of design to home planning.
114. **Interior Design.** (2) W.S. Staff  
The decorative and functional features of the interior of the home.
- 115, 116, 117. **Interior Design.** (3-3-3) A.W.S. Taylor  
History of interior design. A study of period furnishings. A practical study of manufacture, design, installation, and care of media and materials used in interior design and home furnishings. Practical problems in interior decoration. (See Family Life and Home Management.)
121. **Interpretative Drawing.** (2) A. Andrus  
Advanced work in drawing with emphasis on the development of individuality of expression.
122. **Figure Drawing.** (2) W.S. Andrus, Swapp  
Drawing from the model with emphasis on structure and expressive elements.
127. **Oil Painting.** (2) A. Turner  
Outdoor painting.
128. **Oil Painting.** (2) W. Turner  
Still life painting.
129. **Oil Painting.** (2) S. Turner  
Landscape painting.
133. **Water Color Painting.** (2) A. Turner  
Landscape composition.
134. **Water Color Painting.** (2) W. Turner  
Landscape, still-life, and figure composition.
135. **Water Color Painting.** (2) S. Turner  
Outdoor sketching.
140. **Lettering.** (2) A.W. Gunn  
Skills and letter structure for lettering reproduced for the printed page.
141. **Layout.** (2) S. Prerequisite: Art 140. Gunn  
Design principles as they pertain to the organization of elements on the printed page.
142. **Illustration.** (2) W. Gunn  
Black and white illustration in brush and ink, watercolor, scratchboard, and related techniques for line and half-tone reproduction.
143. **Fashion Illustration.** (2) S. Gunn  
Fashion drawing in various media.



- 147. Portrait Photography.** (3) W. Two lectures and one three-hour laboratory period per week. Prerequisite: Physics 26.  
Boel  
General portrait studio procedures, including retouching, portrait darkroom techniques. Emphasis on the plastic quality of light on the human face and figure.
- 148. Pictorial Photography.** (3) S. Two lectures and one three-hour laboratory period per week. Prerequisites: Physics 26 and Art 10.  
Boel  
A study of art structure in its application to photography. Practical experience in photographing the landscape, still-life and the human figure.
- 150. Engraving and Woodcut.** (2) A. Andrus  
Work in relief print making.
- 151. Etching and Lithography.** (2) W. Andrus  
Work on copper and zinc employing aquatint, intaglio and soft ground as well as use of lithographic stone.
- 152. Silk Screen.** (2) S. Andrus  
Preparation of various types of stencils for print making and commercial work.
- 156. Sculpture.** (2) A. Turner  
The use of clay as an expressive medium.
- 157. Sculpture.** (2) W. Turner  
Modeling the full figure.
- 158. Sculpture.** (2) S. Turner  
Casting plaster, stone, and bronze.
- 159, 160, 161. Ceramics.** (2-2-2) A.W.S. Wilson  
Work in all phases of ceramics, designing through firing.
- 162. Textile Design.** (2) A.W.S. Swapp  
Silk screen, block printing, stenciling, painting and dying as media for textile design.
- 164. Plastics.** (2) S. Gamett  
See Industrial Art 5.
- 166. Metalwork and Jewelry.** (2) W. Swapp  
Copper, silver, wood, enameling in creative design.
- 167. Wood Carving.** (2) S. Swapp  
Bas-relief and carving in the round with emphasis on design.
- 168. Art for Elementary School Teachers.** (3) A.W.S. Jenson, Andrus, Swapp  
The art needs of children, and psychological procedures in teaching art. (See Elementary Instruction 106.)
- 171. Teaching Art in the Secondary School.** (3) A. Gunn  
Objectives, curriculum, teaching procedures, and methods for junior and senior high schools.

- 174, 175, 176. **Portrait and Figure Painting.** (2-2-2) A.W.S. Andrus  
 Painting the clothed figure with special emphasis on design, study of character, three-dimensional form in space, and expressive devices.
- 180, 181, 182. **Mural Painting.** (2-2-2) A.W.S. Three laboratory periods per week. Andrus  
 Historical backgrounds, mural design, mural painting.
- 186, 187, 188. **Studio Art.** (1-4, 1-4, 1-4) A.W.S. Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

202. **Composition.** (Arr.) W. Turner
211. **Contemporary Mural Design.** (Arr.) W. Andrus
215. **Period Furnishing.** (3) A. Taylor
216. **Decorative Material for Interior Design.** (3) W. Taylor
217. **Practical Problems in Interior Design.** (3) S. Taylor
- 221, 222, 223. **Advanced Drawing and Painting.** (Arr.) A.W.S. Andrus
- 224, 226. **Landscape Painting.** (Arr.) A.S. Turner
225. **Still-Life Painting.** (Arr.) W. Turner
- 227, 228, 229. **Pictorial Composition.** (Arr.) A.W.S. Turner
- 233, 234, 235. **Advanced Water Color Painting.** (Arr.) A.W.S. Turner
239. **Lettering and Layout for Reproduction.** (Arr.) A.W.S. Gunn
242. **Various Media in Illustration.** (Arr.) W. Gunn
250. **Experimental Relief Printing.** (Arr.) A. Andrus
251. **Color Lithography and Etching.** (Arr.) W. Andrus
252. **Seriography.** (Arr.) S. Andrus
- 256, 257, 258. **Advanced Sculpture.** (Arr.) A.W.S. Turner
265. **Ceramics.** (Arr.) A.W.S. Wilson
266. **Metal Work and Jewelry.** (Arr.) W. Swapp
267. **Wood Sculpture.** (Arr.) S. Swapp

271. Survey of Recent Studies in Art Education. (3) A. Gunn
- 274, 275, 276. Portrait and Figure Design and Painting. (Arr.) A.W.S. Andrus
- 280, 281, 282. Design and Painting Mural Types. (Arr.) A.W.S. Andrus
- 283, 284, 285. Studio Art. (Arr.) A.W.S. Staff
- 286, 287, 288. Studio Art. (Arr.) A.W.S. Staff
- 290, 291, 292. Color. (2-2-2) A.W.S. Andrus
299. Seminar. (1-1-1) A.W.S. Staff
300. Thesis for Master's Degree. Staff

## Bacteriology

Professors: J. V. Beck, Martin (emeritus).

Associate Professors: D. H. Larsen (chairman, 124B), Hallam.

Bacteriology is one of the subjects comprising the composite major in Biological Science designed for prospective teachers.

Medical Technology is under the direction of the Department of Bacteriology. The advisor is Professor D. H. Larsen.

The following curriculum is recommended for students who want adequate preparation for post-graduate university training in bacteriology. The courses of German, physics, advanced mathematics, and advanced chemistry may be replaced by other courses in the physical or biological sciences for students who do not plan on graduate work.

First Year				Third Year			
	A	W	S		A	W	S
Chemistry 14, 15, 16	5	5	5	Bacteriology 101,			
Mathematics 11, 12,				169 .....	5	5	
13 .....	5	5	5	Chemistry 151,			
English 1, 2, 3,				152, 153 .....	5	5	5
or (11, 12, 13) ..	3	3	3	Botany 1 .....	5		
Religion .....	2	2	2	German .....	5	5	5
ROTC .....	2	2	2	Religion .....	2	2	2
Phys. Ed. ....	1	1	1				
Health .....	..	..	1	Total Hrs. ....	17	17	17
Total Hrs. ....	18	18	19				
Second Year				Fourth Year			
	A	W	S		A	W	S
Chemistry 31 .....	5			Bacteriology 181,			
Mathematics 101,				182, 183 .....	5	5	5
102, 103 .....	4	4	4	Bacteriology 196 ....	1	1	1
Physics 31, 32, 33 ..	5	5	5	Bacteriology 198			
Zoology 11 .....		5		or 192 .....		2	3
History 70 .....			5	Chemistry 181			
Religion .....	2	2	2	182, 183 .....	5	5	5
ROTC .....	2	2	2	Religion .....	2	2	2
Total Hrs. ....	18	18	18	Social Science .....	5	3	
				Elective English ....			3
				Total Hrs. ....	18	18	19

### Lower Division Courses

21. **General Bacteriology.** (4) A.W.S. (GER-BS) Three lectures and one two-hour laboratory period per week. Martin, J. Beck, Larsen, Hallam
- A study of the general characteristics of microorganisms and their relation to man.

## Upper Division Courses

- 101. Microbiology.** (5) S. (†GER-BS) Prerequisite: Organic Chemistry. J. Beck  
Introduction to microbiology.
- 121. Water and Sewage Microbiology.** (3) S. (†GER-BS) Prerequisite: Bacteriology 101.  
A study of the microbiology of water purification and sewage disposal. (for Engineering students only.)
- 160. Sanitation and Public Health.** (3) W.S. (GER-BS) Larsen  
Sanitary and public health practices.
- 169. Food and Dairy Bacteriology.** (5) A. Prerequisite: Bacteriology 21 or 101. J. Beck  
A study of the microbiology of water and of food and dairy products.
- 181. Pathogenic Microbiology.** (5) W. Prerequisite: Bacteriology 101 or the consent of the instructor. Larsen  
A study of the characteristics of pathogenic viruses, rickettsia, bacteria, yeasts, and molds.
- 182. Pathogenic Microbiology.** (5) S. Prerequisite: Bacteriology 181. Larsen  
Continuation of Bacteriology 181.
- 183. Immunology.** (5) W. Prerequisite: Bacteriology 181. Larsen  
Theories of immunity; training in serological methods.
- 186, 187, 188. Applied Clinical Diagnosis Laboratory.** (5) A.W.S. Larsen  
Work is done in an approved hospital during a year's practical internship. Hospital selected must be accredited by council of Medical Education of the A.M.A. and its pathologist and radiographic technician recognized by American Society of Clinical Pathologists. Final credits allowed on basis of a statement from the approved pathologist that student has completed intern year and is eligible to take examinations of the American Society of Clinical Pathologists.
- 190. Bacterial Physiology.** (5) S. Prerequisite: Bacteriology 101. Staff  
A study of the cytology, taxonomy, genetics, and metabolism of microorganisms.
- 192. Soil Microbiology.** (See Agronomy 192.)
- 193. Soil Microbiology Laboratory.** (See Agronomy 193.)
- 196. Seminar.** (1) A.W.S. J. Beck, Larsen, Martin
- 198. Special Problems in Bacteriology.** Credit and subject matter to be arranged. J. Beck, Larsen  
Individual work on research problems. Types of problems selected based on previous preparation of student.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- 200, 201, 202. **Advanced Microbiology.** (5-5-5) A.W.S. Pre-requisite: graduate standing in bacteriology or chemistry.  
J. Beck, Larsen
231. **Virology.** (5) S. Staff  
A study of the characteristics of viruses and bacteriophages.
294. **Graduate Seminar.** (1) A.W.S. J. Beck, Larsen
299. **Research to Furnish Data for Thesis.** (Arr.) A.W.S. Staff
300. **Thesis for Master's Degree.** Staff

### Banking

(See courses in Finance and Banking.)

### Bible and Modern Scripture

(See courses in Religion.)

## Botany

Professor: Harrison (chairman, 232 B).

Assistant Professors: K. H. McKnight, E. M. Christensen, Stutz.

Instructor: Murdock.

Students majoring in Botany (except those planning to qualify for Biology teaching or Range Management) should follow this sequence of courses as closely as possible.

Freshman Year	A	W	S
Botany 1, 3 .....	5		5
Zoology 11 .....		5	
Math 1, 11, 12 .....	5	5	5
English 1, 2, 3 .....	3	3	3
Physical Education ..	1	1	1
Health 1 .....		1	
Religion .....	2	2	2
Electives .....	2	1	2
Total hours .....	18	18	18

Junior Year	A	W	S
Botany 102, 103, 106	3	3	3
Botany 180, 181 ....	1	1	
Physics 31, 32, 33 ....	5	5	5
Agronomy 41 .....			4
Chemistry 31 .....		5	
Entomology 30 .....	5		
Zoology 12 .....			5
Religion .....	2	4	
English Literature ..	2		
Electives .....			1
Total hours .....	18	18	18

Sophomore Year	A	W	S
Botany 18, 121, 101 ..	3	3	3
Chemistry 14, 15, 16	5	5	5
Bacteriology 21 .....			4
History 70 .....	5		
Social Science .....		5	
English Literature ..			4
Religion .....	2	2	2
Electives .....	3	3	
Total hours .....	18	18	18

Senior Year	A	W	S
Botany 150, 140, 155	5	5	2
Botany 183, 184 ....	1	1	
Geology 1 .....	5		
Agronomy 107 .....			3
Zoology 45 .....			5
Social Science .....		5	
Religion .....	2	2	2
Humanities & Aes- thetics or Lang- uage sequence ....	5		
Electives .....		5	2
Total hours .....	18	18	18

Students planning to teach Biology should take the following sequence of courses as nearly as possible.

Freshman Year	A	W	S
Botany 1, 3 .....	5		5
Zoology 11, 12 .....		5	5
Math 1, 11 .....	5	5	
English 1, 2, 3 ....	3	3	3
Physical Education ..	1	1	1
Health 1 .....		1	
Religion .....	2	2	2
Total hours .....	16	17	16

Sophomore Year	A	W	S
Botany 18, 121, 101 ..	3	3	3
Chemistry 14, 15, 16 or 7, 8, 9 .....	5	5	5
Geology 1 .....		5	
History 70 .....			5
Zoology 13 or 45 ....	5		
Religion .....	2	2	2
Instruction 170 .....		3	
Educational Values and Programs 30 ..	1		
Educational Adminis- tration 100 .....			3
Total hours .....	16	18	18

Junior Year	A	W	S
Botany 102, 103, 106	3	3	3
Botany 180, 181	1	1	
Agronomy 41			4
Entomology 30		5	
Zoology 157 or 158	(3)	(3)	
Zoology 159 or 160		3	(3)
Religion	2	2	2
Educ. Research and Services 100		5	
Instruction 120			4
Educ. Values and Programs 100			3
English Literature	2	2	2
Humanities & Aesthetics		3	3
Total hours	18	18	17

Senior Year	A	W	S
Botany 150, 140, 155	5	5	2
Botany 183, 184	1	1	
Social Science	5		5
Humanities & Aesthetics			3
Religion	2	2	2
Instruction 138, 139	5	7	
Educ. Research and Services 130 or Educ. Inst. 175			3
Total hours	18	15	15

Students who expect to qualify for positions in Range Management should follow this sequence of courses as nearly as possible. Methods in Range Management, Botany 158, should be taken the first term of summer school following the Junior year.

Freshman Year	A	W	S
Botany 1, 2, 3	5	4	5
English 1, 2, 3	3	3	3
Physical Education	1	1	1
Health 1		1	
Math 1, 11, 12	5	5	5
Religion	2	2	2
Electives	2	2	2
Total hours	18	18	18

Junior Year	A	W	S
Botany 150, 166	5		3
Botany 180, 181	1	1	
Animal Husbandry 7		5	
Agronomy 107			3
Math 152s	5		
Zoology 45, 146		5	5
Social Science (Incl. History 70)	5		5
Economics 1		5	
Religion	2	2	2
Total hours	18	18	18

Sophomore Year	A	W	S
Botany 135, 18	3	3	
Zoology 11			5
Chemistry 7, 8, 9	5	5	5
Agronomy 41, 22		4	3
Geology 1	5		
Physics 21		4	
Drawing 43	2		
Religion	2	2	2
Elective			3
Total hours	17	18	18

Senior Year	A	W	S
Botany 140, 155		5	2
Zoology 157	3		
Animal Husbandry 154, 155	4	5	3
Agronomy 173			4
English Literature	3	3	
Humanities & Aesthetics	3	3	3
Bacteriology 21			4
Religion	2	2	2
Electives	3		

Total hours 18 18 18

Botany is one of the subjects comprising the composite major in Biological Science designed for prospective teachers.



### Lower Division Courses

1. **General Botany.** (5) A.W.S. (GER-BS) Three lectures and two two-hours laboratory periods per week. A prerequisite course to further work in the plant sciences. Recommended for the non-science student. Staff  
The structure, physiology and reproduction of the higher plants.
2. **The Plant Kingdom.** (4) W. (GER-BS) Three lectures and one two-hours laboratory period per week. McKnight  
A survey of the plant kingdom, including the morphology of representative species.
3. **Plant Classification.** (5) S. (GER-BS) Three lectures and two two-hour laboratory periods per week. Harrison  
The general principles of taxonomy and the use of manuals with emphasis on the classification of the local flora.
10. **Trees and Shrubs.** (3) S. (GER-BS) Staff  
The names and characteristics of the common trees and shrubs and their usage as ornamentals and in commerce.
18. **Principles of Genetics.** (3) A.W.S. (GER-BS) Three lectures. Stutz  
Prerequisites: Botany 1 or Zoology 11.  
A study of the principles of heredity and variations.
95. **Histological Technique.** (3) A. One lecture and six hours of laboratory work per week. Prerequisite: Botany 1. McKnight  
The techniques of preparing plant tissues for microscopic examination.

### Upper Division Courses

101. **Algae.** (3) S. Three two-hour periods per week. Prerequisite: Botany 1. McKnight  
A study of the structure, relationships, and life histories of the main groups of algae.
102. **Fungi.** (3) A. Three two-hour periods per week. Prerequisite: Botany 1. McKnight  
A study of the structure, relationships, and life histories of representative fungi.
103. **Mosses and Ferns.** (3) W. Three two-hour periods per week. Prerequisite: Botany 1.  
A study of the structure, relationships, and life histories of mosses, liverworts, and ferns.
106. **Seed Plants.** (3) S. Three two-hour periods per week. Prerequisite: Botany 1. McKnight  
A study of the structure, relationships, and life histories of the seed plants.

121. **Anatomy.** (3) W. Three two-hour periods per week. Pre-requisite: Botany 1. McKnight  
The origin, development, and maturation of the structures of vascular plants.
130. **Advanced Taxonomy.** (3-5) S. Prerequisites: Botany 3, 18, 91. Harrison  
Critical study of the characteristics, ecology, and classification of a limited plant group or plants of a limited area.
131. **Fleshy Fungi.** (3) Summer. McKnight  
The names, characteristics, and distribution of the edible and poisonous mushrooms, pore fungi, and puffballs of Utah.
135. **Range Forage.** (3) A. One lecture and two two-hour laboratory periods per week. Prerequisite: Botany 3. Murdock  
The characteristics, distribution, and value of the more important forage plants of the Western Range. (See Agronomy 135.)
140. **Plant Physiology.** (5) W. Three lectures and two two-hour laboratory periods per week. Prerequisites: Botany 1, Chemistry 14. Harrison  
Water relations, synthesis of foods, digestion, mineral nutrition, and growth in the higher plants.
150. **Plant Ecology.** (5) A. (GER-BS) Three lectures per week and six field trips. Prerequisite: Botany 1 or Zoology 11. Christensen  
The relations of plants to their environment, their adaptations to factors of soil and climate, and their influence on each other.
- 155, 156. **Field Ecology.** (2-2) S. One lecture per week and one long field trip of about one week's duration. Prerequisite: consent of instructor. Murdock  
Field studies of plants and plant communities and the environmental conditions with which they are associated.
158. **Methods in Range Management.** (3-5) S. Prerequisite: Botany 150. Harrison  
Field methods of estimating vegetation, measuring factors of soil and climate, principles of sampling and elementary surveying applied toward the solution of simple field problems.
165. **Plant Geography.** (3) A. (GER-BS) Prerequisite: Botany 1 or Zoology 11. Christensen  
Plant distribution and the origin of plant communities in the light of present and recent geological conditions.
166. **Conservation of Natural Resources.** (3) W. (GER-BS) Murdock  
The need for, and the means of providing, conservation of forests, shrubs, range forage, and other plant cover as they affect land-use management. The influences of vegetation on water supplies and uses, on soil preservation, on live-

stock and wildlife management, and on recreation are considered.

- 170. Diseases of Cultivated Plants.** (5) A. Three lectures and two two-hour laboratory periods per week. Prerequisite: Botany 1; Botany 102 recommended. Stutz  
 Important diseases of cultivated plants, their identification, causes, and methods of control. (See Horticulture 170)
- 180, 181. Seminar—Junior Year.** (1-1) A.W. Required of all majors in their junior year. Staff  
 The presentation and discussion of topics from the current literature of the field.
- 183, 184. Seminar—Senior Year.** (1-1) A.W. Required of all majors in their senior year. Staff  
 The presentation and discussion of topics from the current literature of the field.
- 190, 191, 192. Special Problems.** (1-5) A.W.S. Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- 231. Advanced Taxonomy.** (2-5) S. Prerequisites: Botany 3, 18. Stutz
- 236. Agrostology: Taxonomy and Ecology of Grasses.** (3) A. Prerequisites: Botany 3; 18 recommended. Harrison
- 245. Plant Nutrition and Growth.** (3) A. Prerequisites: 140; Chemistry 14, 15, 16; Chemistry 141, 142, 143 recommended. Harrison
- 252. Field Ecology.** (2) S. Prerequisite: Consent of instructor. Murdock
- 254. Methods in Range Management.** (3-5) S. Prerequisites: 150, 155. Harrison
- 259. Range and Forest Ecology.** (2-4) A.S. Prerequisite: Consent of instructor. Harrison, Murdock
- 260. Experimental Ecology.** (3) S. Prerequisite: 140, 150. Harrison
- 268. Conservation of Natural Resources.** (2-5) A.W.S. Prerequisite: Consent of instructor. Christensen, Murdock
- 285, 286. Seminar.** (1-1) A.W. Staff
- 290, 291, 292. Special Problems.** (2-5) A.W.S. Staff
- 300. Thesis for Master's Degree.** Staff

## Business Management

Professors: R. L. Smith (chairman, 133 N), Boyle, Ellsworth, E. Miller.

Associate Professors: Croft, O. R. Smith.

Instructor: Gardner.

Effective business managers must have skill in defining and analyzing the problems of business and the ability to reach reasoned decisions, communicate those decisions effectively, and secure proper implementation of those decisions within the framework of the business organization. For this reason the major emphasis in the program of the department is to provide the student with a desirable technical background in business, plus a comprehensive experience in the solving of business problems and in written and oral communications.

For the academic year 1956-57 the emphasis of the departmental program will shift from the general field of business management to the more specific area of industrial management. The curriculum for the junior and senior years will be modified accordingly. This will not affect seniors completing their program in the spring of 1956.

In order that all students who plan to be graduated with a major in one of the five departments of Accounting, Business Management, Economics, Finance and Banking, and Marketing, may have a common background of basic information and tools to facilitate their advanced work, they are required to take the core courses listed below. These courses form a basic training normally to be completed during the first two years of college work and before the student is admitted to a major department. Students in the College of Commerce will be counseled during this program by members of the staff selected by the office of the Dean of the College of Commerce.

Accounting 1 and 2	10 hours
Business Management 35	5 hours
Business Management 75	5 hours
Economics 1	5 hours
Psychology 11 or substitute approved by counselor	5 hours

The courses in Economics and Psychology listed above apply toward the University general education requirement in social science. In addition to the above courses, it is recommended that many students in these departments will be able to fill the American History and Government requirement best by taking Economics 74 and Political Science 10.

Students majoring in Business Management are required to take Business Management 35, 75, 120, 130, 150, 151, 152, and

250; Economics 1, 145; Accounting 1, 2; Finance and Banking 151, 154, 268; and Marketing 107. In addition, the following courses are highly recommended: Business Management 161, 163; Accounting 188; Economics 167, 176; Finance and Banking 254; Marketing 170 or 171; Mathematics 1 or 11.

### Lower Division Courses

- 35. Mathematics of Business.** (5) A.W.S. Gardner  
Application of mathematics to business; includes markup pricing, discounts, simple and compounds interest, annuities, amortization, sinking funds, bond valuation and depreciation.
- 75. Business and Economic Statistics.** (5) A.W.S. Includes three periods of lecture and two two-hour laboratory periods per week. Gardner  
Introduction to the sources, the methods of processing and the presentation of statistical data. Experience in dealing with raw statistical data, machine operation, chart and graph preparation, and statistical report writing will be given in the laboratory sections.

### Upper Division Courses

- 120. Managerial Control.** (5) A.W.S. Prerequisites: Accounting 1, 2; Business Management 35, 75. R. L. Smith  
For non-accounting majors who must use and understand accounting data as a basis for action. Point of view is that of management. The course deals with the product of the accountant rather than the process of accounting.
- 130. Industrial Management.** (5) A.W.S. Staff  
An introductory course to the production function of business. Deals with problems and techniques in the areas of plant location and layout, machinery and equipment utilization, employee-employer relations, and industrial control.
- 132. Business Report Writing.** (3) S. Prerequisite: Secretarial Training 31. Staff  
Deals with written communications in business with special attention given to the following types of reports: performance, fact-finding, problem-determining, and analysis-action. Report content as well as techniques will be emphasized.
- 135. Public Relations.** (3) S. O. R. Smith  
(See Journalism 135.)
- 150, 151, 152. Problems in Management.** (5-5-5) A.W.S. Prerequisites: Accounting 1, 2; Business Management 35, 75, 120, 130; Economics 1, 145; Finance and Banking 151; Marketing 107. R. L. Smith  
A one-year course. Deals chiefly with problems requiring analysis, decision, and action on the part of business executives. However, the cases studied require recognition of the whole business environment of the problems, including

their marketing, financial, and human implications. Extensive case analysis and report writing are supplemented with readings in collateral material.

155. **Principles of Risk Bearing.** (5) A.S. Boyle  
(See Finance and Banking 155.)
160. **Office Organization and Management.** (3) W. Croft  
Principles and techniques of efficient and effective office procedure and planning, including the functions of personnel, equipment, and systems.
161. **Labor Problems.** (3) A. Miller  
(See Economics 161.)
163. **Personnel Management.** (5) A. Staff  
Principles and techniques involved in developing a modern personnel organization for protecting the welfare of employees and promoting effective labor management. Employee selection, training, promotion, and incentives are stressed.
164. **Industrial Psychology.** (3) W. Prerequisite: Psychology 11. Staff  
(See Psychology 164.)
167. **Personnel Psychology.** (3) S. Prerequisite: Psychology 11. Staff  
(See Psychology 167.)
195. **Business Contact.** (3) A.W.S. Must be taken concurrently with Business Management 150, 151, or 152. R. L. Smith, Staff

This course is designed to build confidence in abilities developed in the classroom and to provide experience which will be helpful in meeting employment opportunities at graduation. The student will be given a choice between these alternatives: (1) working for a period equivalent to no more than twenty hours a week for one quarter in a job with a local company under departmental supervision; (2) working as a member of a research team on a University-sponsored project for the same length of time (or as approved by the faculty).

### Graduate Course

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

250. **Administrative Policy.** (5) S. Prerequisites: Business Management 150, 151, and concurrently with 152. R. L. Smith

### Business Program

(Pre-graduate)

(See College of Commerce.)

## Chemistry

### Chemistry and Chemical Engineering Science

Professors: Broadbent (chairman, 320-2 ESC), Bryner, Goates, J. K. Nicholes.

Associate Professors: K. P. Anderson, Blackham, Bullock, H. W. Peterson, A. D. Swenson, Vernon.

Assistant Professors: B. Brown, Wing.

Superintendent of Laboratories: J. L. Larson.

The Department of Chemistry offers four beginning courses in chemistry: Chemistry 1 for general education; Chemistry 2, 3, and 4, primarily for students in nursing, home economics, and general agriculture; Chemistry 7, 8, and 9, also for students in home economics and agriculture; and Chemistry 14, 15, and 16 for students who expect to major in the physical sciences and engineering, the biological sciences, medicine, and the teaching of science.

Chemistry majors should follow the suggested program of courses listed below, which also satisfies the requirements for certification by the American Chemical Society. Biochemistry 181, 182, and 183 may be added to or substituted for Chemistry 191, 192, and 193.

For a teaching major, the following courses are recommended: Chemistry 14, 15, 16, 31, 101, 151, 152, 153, 161, 162, and 163.

For the master's degree, the following courses should be included: Chemistry 211, 212, 221, 251, 252, 261, 262, 267, 297, 300, plus nine additional hours, making a minimum total of 45 hours.

For Entrance requirements into the College of Physical and Engineering Sciences, see page 405 of this catalog.

For Chemical Engineering, see Department of Engineering Sciences.

### SUGGESTED COURSES FOR CHEMISTRY MAJOR

#### Freshman Year

	A. W. S.		
Chem. 14, 15, 16, Principles of Chemistry .....	5	5	5
Math. 11, 12, 13, Algebra, Trig., Analytic Geometry .....	5	5	5
English 1, 2, 3, or 11, 12, 13, Composition & Literature .....	3	3	3
Physical Education .....	1	1	1
Health 1, Personal Hygiene .....			1
Religion .....	2	2	2
AFROTC or Elective .....	2	2	2
	<hr/>		
Total Hours .....	18	18	19

**Sophomore Year**

Chem. 31, 132, Quantitative Chemistry .....	5	5	
Chem. 111, Advanced Inorganic Chemistry .....			5
Math. 91, 92, 93, Calculus .....	4	4	4
Physics 41, 42, 43, General Physics .....	5	5	5
Religion .....	2	2	2
AFROTC or Elective .....	2	2	2
	<hr/>	<hr/>	<hr/>
Total Hours .....	18	18	18

**Junior Year**

Chem. 151, 152, 153, Organic Chemistry .....	5	5	5
Math. 111, 112, Definite Integrals, Diff. Equations .....	3	3	
Biological Science .....	5	2	5
German 1, 2, 3 .....	5	5	5
Religion .....		3	3
	<hr/>	<hr/>	<hr/>
Total Hours .....	18	18	18

**Senior Year**

Chem. 161, 162, 163, Physical Chemistry .....	4	4	4
Chem. 191, 192, 193, Chem. Lit. and Scientific Writing ....	2	2	2
English .....			3
History 70 .....		5	
Social Science .....	5		2
German 167, 168, 169 .....	3	3	3
Religion .....	2	2	2
Elective .....	2	2	2
	<hr/>	<hr/>	<hr/>
Total Hours .....	18	18	18

**Lower Division Courses**

- 1. Introductory General Chemistry.** (3) A.W.S. (GER-PS) Staff  
For students other than science majors. Students who have had high school chemistry should register for Chemistry 14.
- 2. Introductory Inorganic Chemistry.** (5) A. (GER-PS) Three lectures, two quizzes, and two two-hour laboratory periods per week. Staff
- 3. Introductory Organic Chemistry.** (4) W. (†GER-PS) Three lectures, one quiz, and one two-hour laboratory period per week. Prerequisite: Chemistry 1, 2, or 7. Staff
- 4. Introductory Biochemistry.** (3) S. Two lectures, one quiz, and one two-hour laboratory period per week. Prerequisite: Chemistry 3 or equivalent. Staff
- 7, 8. General Inorganic Chemistry.** (5-5) A.W. (GER-PS) Three lectures, two quizzes, and two two-hour laboratory periods per week. Staff



9. **Elementary Organic Chemistry.** (5) S. Three lectures, two quizzes, and two two-hour laboratory periods per week. Prerequisite: Chemistry 8 or equivalent. Staff
14. **Principles of Chemistry.** (5) A.W. (GER-PS) Three lectures, two quizzes, and two two-hour laboratory periods per week. Prerequisites: two years high school mathematics; high school chemistry or physics or Chemistry 1. Required of chemistry, engineering, physical science, and biological science majors, and pre-medical and pre-dental students. Staff
15. **Principles of Chemistry.** (5) W.S. (GER-PS) Three lectures, two quizzes, and two two-hour laboratory periods per week. Prerequisite: Chemistry 14. Staff
16. **Principles of Chemistry and Qualitative Inorganic Analysis.** (5) S. Two lectures, one quiz, and two three-hour laboratory periods per week. Prerequisite: Chemistry 15. Staff
- 21, 22. **Quantitative Analysis.** (3-3) A.W. Three lectures and two two-hour laboratory periods per week. Prerequisites: Chemistry 9 or 16. Anderson  
Principles and practice of quantitative analysis.
23. **Quantitative Analysis.** (4) S. Three lectures and two two-hour laboratory periods per week. Prerequisites: Chemistry 2 and 3 or 7 and 8. Staff  
Primarily for students interested in biological and food materials.
31. **Quantitative Analysis.** (5) A.W. Three lectures, three three-hour laboratory periods per week. Prerequisites: Chemistry 16 and College Algebra. For science and engineering majors. Wing, Anderson  
Gravimetric and volumetric analysis.

### Upper Division Courses

101. **Methods of Glass Manipulation.** (1) A.W.S. Two two-hour laboratory periods per week. Bryner  
Exercises in glass working. Registration by permission of instructor.
110. **Introductory Physiological Chemistry.** (5) A. Three lectures and two two-hour laboratory periods per week. Prerequisite: Chemistry 9 or 16. Vernon
111. **Inorganic Chemistry.** (5) S. Five lectures. Prerequisite: Chemistry 31. Staff
- 114, 115. **Introduction to Chemical Engineering.** (3-3) A.W. Three lectures per week. Prerequisite: Physics 92. Blackham  
The stoichiometry of industrial chemical processes; study of material and energy balances.
117. **Mineralogy.** (3) A. (See Geology 117.) Bullock

- 125. Fuels and Fuel Analysis.** (2) S. One lecture, one three-hour laboratory period per week. Wing

A study of the important fuels used in industry. Experimental methods in analysis of fuels.

- 132. Quantitative Analysis.** (5) W.S. Two lectures, one quiz, three three-hour laboratory periods per week. Prerequisite: Chemistry 22 or 31. Wing, Anderson

Advanced quantitative analysis.

- 136. Fire Assaying.** (3) A.S. Two lectures and two two-hour laboratory periods per week. Prerequisite: Chemistry 31. Wing

Assays of gold, silver, copper, and lead ores.

- 151, 152, 153. Organic Chemistry.** (4-5, 4-5, 4-5) A.W.S. Three lectures and one or two three-hour laboratory periods per week. Prerequisites: Chemistry 16, 22 or 31. Broadbent, Staff

- 161, 162, 163. Physical Chemistry.** (4-4-4) A.W.S. Three lectures and one three-hour laboratory period per week. Prerequisites: Physics 43, Calculus, and Chemistry 22 or 31. Bryner

- 165. Chemical Engineering Thermodynamics.** (3) A. Three one-hour lecture-recitation periods per week. Brown

A study of thermodynamics as applied to industrial chemical processes.

- 171, 172, 173. Chemical Engineering Unit Operations.** (3-3-3) A.W.S. Three one-hour lecture-recitation periods per week. Brown

A study of the unit operations of chemical engineering which includes fluid flow, filtration, heat transfer, sedimentation, evaporation, distillation, and drying.

- 174, 175, 176. Chemical Engineering Unit Operations Laboratory.** (2-2-2) A.W.S. Two laboratory periods per week. Brown

- 177, 178. Engineering Materials.** (3-3) A.W.S. Two one-hour lecture-recitation periods per week. Brown

A study of the chemistry and applications of metallic and non-metallic materials in engineering.

- 179. Chemical Process Principles.** (3) W. Three one-hour lecture-recitation periods per week. Blackham

A study of industrial chemical processes.

- 181, 182, 183. Biochemistry.** (5-5-5) A.W.S. Three lectures and two three-hour laboratory periods per week. Prerequisites: Chemistry 22 or 31, 153. Swensen

An introduction to the chemistry of substances and processes of biological significance.

- 191, 192, 193. Seminar in Chemical Literature and Scientific Writing.** (2-2-2) A.W.S. One lecture period and one period in scientific library per week. Open to advanced undergraduates and recommended for senior chemistry majors. A grade of B or better in this course exempts potential chemistry graduate students from the regular test of ability to write clearly in English. Broadbent  
Literature study and report writing.
- 196. Principles of Plant Design.** (2) W. Two two-hour lecture-recitation periods per week. Brown
- 197. Special Problems.** Time and credit to be arranged. Registration by permission. Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

### Inorganic Chemistry

- 211. Systematic Inorganic Chemistry.** (3) A. Peterson
- 212. Theoretical Inorganic Chemistry.** (3) W. Blackham
- 213. Inorganic Synthesis.** (3) S. Peterson

### Analytical Chemistry

- 221. Theory of Quantitative Analysis.** (3) S. Anderson
- 222. Microchemical Analysis.** (1-3) A.W.S. Wing
- 237. Instrumental Analysis.** (2-3) S. Goates

### Organic and Biochemistry

- 251. Qualitative Organic Analysis.** (3-4) A. Broadbent
- 252, 253. Advanced Organic Reactions.** (3-3) W.S. Broadbent
- 254. Organic Synthesis.** (2-3) W. Broadbent
- 281. Advanced Biochemistry.** (3) A. Swensen
- 282. Advanced Biochemistry.** (3) W. Swensen
- 283. Enzyme Chemistry.** (5) S. Vernon

**Physical Chemistry**

- |   |               |
|---|---------------|
| 261. Chemical Thermodynamics. (4) A.        | Goates, Brown |
| 262. Chemical Thermodynamics. (4) W.        | Goates, Brown |
| 264. Radio Chemistry. (3) S.                | Anderson      |
| 267. Atomic and Molecular Structure. (3) A. | Blackham      |

**Other Courses**

- |                                   |          |
|-----------------------------------|----------|
| 290. History of Chemistry. (3) S. | Nicholes |
| 297. Research.                    | Staff    |
| 300. Thesis for Master's Degree.  | Staff    |

**Church History**

(See courses in Religion.)

**Civil Engineering Science**

(See courses in Engineering Sciences.)

**Clothing and Textiles**

(See courses in Family Living.)

**Comparative Literature**

(See courses in English.)

**Dairy Husbandry**

(See courses in Animal Husbandry.)

**Dramatic Arts**

(See courses in Speech and Dramatic Arts.)

**Drawing**

(See courses in Industrial Arts and Drawing.)

## Economics

**Professors:** Pond (chairman, 129N), Boyle, H. R. Clark, Edwards, E. Miller.

**Associate Professors:** Corbridge, Nelson.

**Instructor:** Davies.

In order that all students who plan to be graduated with a major in one of the five departments of Accounting, Business Management, Economics, Finance and Banking, and Marketing may have a common background of basic information and tools to facilitate their advanced work, they are required to take the core courses listed below. These courses form a basic training normally to be completed during the first two years of college work and before the student is admitted to a major department. Students in the College of Commerce will be counseled during this program by members in the College of Commerce staff selected by the office of the Dean of the College of Commerce.

Accounting 1 and 2	10 hours
Business Management 35	5 hours
Business Management 75	5 hours
Economics 1	5 hours
Psychology 11 or substitute approved by counselor	5 hours

Students majoring in economics are required to take Economics 74, which together with Political Science 10 fills the American History and Government requirement and should be taken in place of History 70.

In addition to the above courses, students majoring in this department are required to take Economics 145, 153, 246, 249; Marketing 107. Recommended: Economics 161, 167; Finance and Banking 151, 254, 268.

Economics is one of the subjects comprising the composite majors in business and in social science designed for prospective teachers.

### Lower Division Courses

#### 1. Economic Principles and Problems. (5) A.W.S. (GER-SS) Staff

Basic general education course in economics to prepare students for citizenship by training in fundamental economic principles and developing an understanding of the most important aspects of some of the critical economic problems facing America and the world today.

#### 2. Contemporary Economic Problems. (5) A.W.S. Prerequisite: Economics 1. Staff

Deals with important contemporary economic problems. Designed especially for transfer students.

- 74. Economic and Financial History of the United States.** (5) A.W.S. Staff

A study of the origins and development of agriculture, commerce, industry, finance, labor, international trade, and public policies in the United States as they affect our present economic structure, forces, and activities.

- 75. Business and Economic Statistics.** (5) A.W.S. Staff

Introduction to the sources, the methods of processing, and the presentation of statistical data. Experience in dealing with raw statistical data, machine operation, chart and graph preparation, and statistical report writing will be given in the laboratory sections. (See Business Management 75.)

### Upper Division Courses

- 145. Intermediate Economic Theory.** (5) A.W.S. Prerequisite: Economics 1. Staff

Intensive analysis of production principles and price theory.

- 151. Economics of Consumption.** (3) A.W. Boyle  
(See Marketing 151.)

- 153. Money and Banking.** (4) A.S. Clark  
(See Finance and Banking 153.)

- 156. Transportation and Traffic Management.** (5) A. Davies  
The growth and development of modern methods of transportation, problems of rate determination, the development of public regulation, current problems, problems of traffic management for transportation companies and industrial and commercial organizations.

- 161. Labor Problems and Labor Relations.** (3) A. (GER-SS) Davies  
Rise and growth of labor organizations resulting from modern industrialization, public regulation of the labor movement, development and organization of the wage system, and problems of labor-management relationships.

- 167. Government Finance.** (5) W. (GER-SS) Pond  
The financing of federal, state, and local government. Includes a study of expenditures; principles and practices of budgeting; governmental revenues, with emphasis on problems of taxation; and public debt. (See Finance and Banking 167.)

- 176. Government and Business.** (3) A. Staff  
General survey of governmental activities affecting business. The political, economic, and legal bases of governmental regulation and the probably limits and difficulties in applying such regulation to our economic system.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

- |   |            |
|---|------------|
| <b>246. Advanced Economic Theory.</b> (5) S. Prerequisite: Economics 145.                       | Pond       |
| <b>249. History of Economic Thought.</b> (5) W.   | Davies     |
| <b>262. Collective Bargaining and Industrial Relations.</b> (3) W. Prerequisite: Economics 161. | Pre-Davies |
| <b>263. Labor Law.</b> (3) S. Prerequisite: Economics 161.                                      | E. Miller  |
| <b>268. Economics of Finance.</b> (5) W.  | Edwards    |
| <b>278. International Trade and Finance.</b> (3) S.   | Corbridge  |
| <b>285, 286, 287. Seminar.</b> (1-2, 1-2, 1-2) A.W.S.   | Staff      |
| <b>296, 297, 298. Research (Arr.)</b> A.W.S.  | Staff      |
| <b>300. Thesis for Master's Degree.</b>   | Staff      |

### Economics, Agricultural

(See courses in Agricultural Economics.)

### Economics and Management of the Home

(See courses in Family Living.)

## Education: Instruction

Professors: Boyle (emeritus), H. Peterson (emeritus), H. G. Clark, C. J. Hart, Holbrook, E. M. Jenson.

Associate Professors: Browne (chairman, —McK), Andrus, Belnap, Campbell, A. J. Clarke.

Assistant Professors: Hammond (emeritus), Alder, Babcock, Barrett, Bauer, Berryessa, Callahan, Candland, Gunn, Hilton, Howe, Knight, Krider, F. Madsen, Maeser, Tyndall, W. B. Wilson.

Instructors: McAllister (emeritus), L. Anderson, Bangerter, Brace, Chandler, Cowan, Flandro, R. Hansen, Hartvigsen, M. S. Jacobs, G. D. Jensen, McIntosh, V. B. Poulson, Purdy, Sorenson, Swapp, Thorne.

The offerings in this department are intended to assist teachers in the development of the skills involved in the act of instruction, whether it be in or out of the classroom, and at any level or in any special area of education. Courses sponsored exclusively by this department are usually limited to those in which methodology of teaching or problems in organizing materials for teaching are the dominant content. Courses which give considerable attention to subject matter as such are usually offered by the subject matter departments in the University, on a basis of joint approval of instructors and of course outlines.

The offerings in instruction are presented under the following divisions: elementary, secondary, college, adult, industrial, and religious. There is also a general division under which are listed courses of service to all the other divisions.

### Elementary Instruction

A major in Elementary Instruction consists of forty-five hours. Courses which are prescribed and others which are recommended are indicated on a list of instructions available in the office of the Department Chairman. A minor of twenty hours and an additional related ten hours essential to elementary teachers are required of students who major in elementary instruction. Electives for the minor may be selected from other departments under the direction of an advisor in elementary instruction.

### Upper Division Courses

102. **Early Childhood Education.** (3) S. Campbell, Candland, Staff  
Principal attention given to kindergarten and first grade.  
Formerly Elementary Education 192.

104. **Arts and Crafts for Elementary Teachers.** (2) A.W.S. Alder  
Andrus, Staff

A practical course in handicrafts for teachers of children in the elementary school. Formerly Elementary Education 156.



- 105. Arts and Crafts for Early Childhood.** (2) A.W.S. Alder, Staff  
A practical course in handicrafts for teachers in kindergarten and first grade. Formerly Elementary Education 159.
- 106. Art for Elementary School Teachers.** (3) A.W.S. Jenson, Andrus, Wilson, Swapp, Staff  
Materials and procedures for stimulating and guiding child development in the various phases of art in the elementary school. Attention will be given to the relationship of art to the entire school program. Formerly Elementary Education 165.
- 107. Music for Elementary Teachers.** (3) A.W.S. Prerequisite: General Music 2 or the equivalent. Madsen  
Materials and procedures for stimulating and guiding child development in the various phases of music in the elementary school. Attention will be given to the relationship of music to the rest of the school program. (See General Music 190.) Formerly Elementary Education 190.
- 108. Manuscript Writing for Elementary Teachers.** (2) S. Candland, Howe, Staff  
Manuscript writing for children in the elementary school. Formerly Elementary Education 169.
- 110. Children's Literature.** (3-5) A.W.S. Hammond, Staff  
Evaluation of children's books, past and present, that meet children's needs and have lasting significance. A survey of radio and television programs and comics and their effects upon children and children's reading habits. Formerly Elementary Education 168.
- 113. Selection and Use of Library Materials for the Elementary School.** (3) W. Summer. Staff  
(See Library Science 165.)
- 115. Foundations and Curriculum of Elementary Education.** (5) A.W. Prerequisites: Educational Research 100 and fifteen hours of selected work in Education. Campbell, Candland, Howe, Babcock, Berryessa, Maeser, Staff  
The psychological foundations of curriculum and materials of the elementary school together with methods in elementary education. It must be taken before or parallel with Elementary Instruction 118. Formerly Elementary Education 181.
- 116. The Curriculum and Methods of Elementary Education.** (5) W.S. Prerequisite: Elementary Instruction 115. Babcock, Campbell, Candland, Howe, Berryessa, Maeser, Staff  
A continuation of Elementary Instruction 115. It should parallel Elementary Instruction 118. Required for certification. Formerly Elementary Education 182.
- 117. Elementary Curriculum and Methods.** (3-5) S. Prerequisite: Fifteen hours Education. Babcock, Berryessa, Campbell, Candland, Howe, Maeser, Staff  
Designed especially for experienced teachers who wish to

refresh or upgrade their service in the schools. Limited to seniors and graduate students. Formerly Elementary Education 183.

118. **Student Teaching.** (6) A.W.S. Minimum of 12 credit hours for certification. Prerequisite: 15 credit hours of professional work. Elementary Instruction 115 and 116 should precede or parallel this course.

Campbell, Howe, Babcock,  
Berryessa, Candland, Maeser

Essentially a laboratory course affording opportunity for student teachers to apply the principles of teaching developed in other courses of the teacher preparation program. Unit plans, daily plans, and daily schedules are required of the student teacher. Only seniors and third-quarter juniors regularly enrolled in the College of Education or students in the Graduate School may be admitted to elementary student teaching.

Application for elementary student teaching must be made to the Department of Elementary Instruction at least three months prior to registering for this course. Admission is contingent upon approval by the Committee on Admission to Student Teaching. A student will not be considered for elementary student teaching until he has been admitted to the College of Education. An applicant will be expected to maintain high standards in all of his work. Applicant must present evidence of good health in addition to normal speech and hearing; applicants must demonstrate acceptable qualities of morality, as well as emotional and social maturity.

Students who are assigned to student teaching must reserve time for supervisory meetings. A fee of \$10.00 per quarter is charged to provide transportation to and from cooperating schools. Formerly Elementary Education 184.

119. **Directed Observation.** (3) A.W.S. Campbell, Staff

Observation and evaluation of the teaching-learning situation. A fee of \$10.00 per quarter is charged to provide transportation to and from cooperating schools. Formerly Elementary Education 185.

123. **Demonstration Experiences.** (2) A.W.S. Prerequisites: Work in each area given below, and permission of the instructor.

Poulson

Experience is given in the planning and execution of demonstrations in the area of clothing, food, housing, management, child care, and family relationships, with emphasis on the management aspect in each area. Methods of demonstration adapted to the teaching of homemaking in secondary schools are stressed. (See Homemaking Education 123.)

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

201. **Curriculum Building in the Elementary School.** (3) W. Maeser, Campbell, Candland, Staff
202. **Advanced Study in Early Childhood Education.** (3) (Arr.) Campbell, Candland
204. **Arts and Crafts for Elementary Teachers.** (2) (Arr.) Andrus
205. **Creative Arts in the Elementary School.** (2) A. Andrus
211. **Language Arts in the Elementary School.** (3) W. Campbell  
Candland, Maeser, Staff
212. **Reading in the Elementary School.** (3) W. Candland,  
Maeser, Staff
213. **Science in the Elementary School.** (3) S. Babcock,  
Berryessa, Howe, Staff
214. **Arithmetic in the Elementary School.** (3) W. Babcock,  
Maeser
215. **Social Studies in the Elementary School.** (5) A. Campbell,  
Candland, Howe, Maeser

## Secondary Instruction

Teachers in secondary schools are often called on to teach in more than two subject-matter fields. The traditional major and minor subject arrangement has some disadvantages as preparation for versatility in teaching subjects. For that reason the University offers two approaches to certification. One is the traditional major and minor arrangement. The other is a composite major arrangement. The composite major must consist of not less than sixty hours of credit distributed in two or more related fields (preferably three) with not less than eighteen hours in any one subject. This approach has some disadvantages for the student in that it may not provide him with enough credit in one field to permit him to begin graduate work in the field immediately upon graduation with the baccalaureate degree.

Details of the composite major program are contained in this catalog under the discussion of the College of Education, beginning on page 384. The composite major is available at present only to those students who are majoring in the College of Education

## Upper Division Courses

120. **Methods and Curriculum.** (4) A.W.S. Prerequisites: Research and Psychological Services 100. Callahan, Flandro,  
The various techniques and methods used by high school teachers, and the high school curriculum as related to the developmental needs of youth. Practice in planning and providing effective learning experiences for the high school student will be emphasized. Formerly Secondary Education 167.

- 122. Methods of Teaching Homemaking.** (3) A. V. Poulson  
Teaching methods as applied to home economics curriculum content, equipment, and teaching facilities; laboratory arrangement and management. Formerly Secondary Education 154. (See Homemaking Education 122.)
- 124. Problems in Teaching Homemaking.** (2) A.W.S. To be taken in the same half of the quarter (blocked), with Instruction 139. V. Poulson  
(See Homemaking Education 124.) Formerly Secondary Education 155.
- 127. Driver Education and Training for High School Teachers.** (2) S. (See Physical Education 172.) Bangerter  
Two periods each week. Special fee. This course is designed to qualify high school teachers as instructors in driver education and behind-the-wheel training. Formerly Education 170.
- 132. Selection and Use of Library Materials for the Secondary School.** (3) S. Summer. Staff  
(See Library Science 167.)
- 133. Introduction to Bibliography.** (3) S. Summer. Staff  
(See Library Science 170.)
- 138. Secondary Student Teaching.** (5) A.W.S. Prerequisites: (1) Satisfactory achievement in basic skills and professional knowledge as determined by tests required by the department; (2) approximately one-half of the requirements in Education, including Educational Research 100 and Instruction 120; (3) endorsement by the head of the department in the field of study forming the dominant academic interest; (4) a composite major or an academic major and minor acceptable to the College of Education; (5) committee approval of written application made at least one quarter prior to date of beginning teaching. Consultation: teaching periods to be arranged. Callahan, Flandro  
Madsen, Gunn, Poulson, Cowan, Bangerter  
This is a course in student teaching under supervision. One hour daily throughout the quarter of participation in classroom activities and responsible class instruction will be required. In addition, study of special methods for teaching in subject matter areas will be required by the supervising teachers on two days a week at 4:00 p.m. Areas considered are Art, Biology, English, Foreign Languages, Home Economics, Mathematics, Industrial Arts, Music, Secretarial Practice, Speech, Health, Physical Education. Physical Sciences, Social Science. Formerly Secondary Education 184a. (See Homemaking Education 138.)  
A fee of \$10.00 per quarter is charged to provide transportation to and from cooperating schools.
- 139. Secondary Student Teaching** (7-11) A.W.S. Prerequisite: Secondary Instruction 138. Flandro, Callahan, Madsen, Gunn, Poulson, Cowan, Bangerter, Staff  
This is a continuation of Secondary Instruction 138. It is

designed to place the student teacher in a secondary school for a full quarter on a half-day basis. Close contact with faculty and students, participation on committees and in extra-curricular activities, and much responsible teaching are expected. For eleven hours credit the student must make special arrangements with the Director of Student Teaching during the first quarter of student teaching. Formerly Secondary Education 184b. (See Homemaking Education 139.)

A fee of \$10.00 is charged to provide transportation to and from cooperating schools.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- 220. **The High School Curriculum.** (3) A. Callahan
- 221. **Senior High School Curriculum Workshop.** (3) S. Bauer,  
Flandro, Callahan
- 222. **Junior High School Curriculum Workshop.** (3) A. Bauer  
Flandro, Callahan
- 223. **Teaching Home Economics in the Secondary Schools.** (3) W.  
Staff
- 225. **Directing Out-of-Class Activities in the Secondary Schools.**  
(3) A. Callahan
- 226. **The Improvement of Reading in the Secondary Schools.**  
(3) W. Bauer
- 227. **Teaching Art in the Secondary Schools.** (3) W. Staff
- 228. **Teaching English in the Secondary Schools.** (3) S. Bauer
- 229. **Teaching Mathematics and Science in the Secondary Schools.**  
(3) W. Staff
- 230. **Teaching Music in the Secondary Schools.** (3) W. Madsen
- 231. **Teaching Social Studies in the Secondary Schools.** (3) S.  
Staff
- 232. **Teaching Speech in the Secondary Schools.** (3) W. Staff
- 233. **Methods of Teaching Journalism in Secondary Schools.**  
(3) S. Smith  
(See Journalism 268.)
- 235. **Bibliography of the Sciences.** (3) Summer. Staff  
(See Library Science 271.)
- 236. **Bibliography of the Humanities.** (3) Summer. Staff  
(See Library Science 272.)

237. **Bibliography of the Social Sciences.** (3) Summer. Staff  
(See Library Science 273.)

## College Instruction

### Graduate Course

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

240. **Teaching in the College and University.** (3) A.W.S.  
H. G. Clark, Staff

## Adult Education Instruction

### Graduate Course

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

245. **Adult Education Programs.** (2) S. H. G. Clark, Hilton

## Industrial Instruction

### Upper Division Courses

150. **Principles and Objectives of Industrial Arts.** (3) Staff  
Formerly Secondary Education 161 (See Industrial Arts 161.)
151. **Methods of Teaching Industrial Arts.** (3) Staff  
Formerly Secondary Education 162. (See Industrial Arts 162.)

## Religious Instruction

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

260. **Methods of Teaching Religion.** (3) S. Anderson, Berrett
261. **Survey of Religious Education.** (2) A.S. Belnap  
(See Church History and Philosophy 201.)

263. **Methods and Techniques for Religious Educators.** (2) (Not given this year.) Belnap  
(See Church History and Philosophy 202.)

## General Instruction

### Upper Division Courses

170. **Health Education for Teachers.** (3) A.W.S. Hart  
Designed especially for those who are preparing to teach in the public schools. Formerly Education 158. (See Health 157.)
171. **Materials and Methods in Safety Education.** (2) A. Bangerter  
Formerly Education 157. (See Health 157.)
172. **Education Through Play Activities.** (3) A. Holbrook  
The theory of play considered biologically, historically, and currently in the educational processes. (See also Recreation 131.) Formerly Education 131.
175. **Audio-Visual Education.** (3) A.W.S. Tyndall, Hartvigsen, Staff  
An introduction to the audio-visual field. Sources, selection, evaluation, and utilization of audio-visual materials in the classroom in accordance with modern psychology of learning. Operation and care of projection equipment. Laboratory work will include making and collecting teaching materials such as flat pictures, slides, filmstrips, graphs, and charts.
177. **Motion Picture Photography.** (3) A.S. Prerequisites: Physics 26, Speech 51, Education 175 or equivalent. Tyndall, Hartvigsen, Staff  
Principles of motion picture photography in educational, recreational, and professional application; practice in use of motion picture camera for indoor and outdoor subjects; script preparation, film editing, titling, sound recording, and special effects.
180. **Classification.** (3) W. Summer. Staff  
(See Library Science 150.)
181. **Cataloging.** (3) W. Summer. Staff  
(See Library Science 151.)
182. **Library Science for Teachers and Administrators.** (3) A. Summer. Staff  
(See Library Science 163.)
- 194, 195. **Independent Reading.** (1-3) A.W.S. Staff
- 196, 197. **Seminar.** (1-3) A.W.S. Staff
- 198, 199. **Independent Research.** (1-3) A.W.S. Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree,

see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

275. **Audio-Visual Materials and Procedures.** (3) W. Prerequisites: General Instruction 175. Tyndall
278. **Radio and Television in Education.** (2) S. Tyndall
280. **Education of Exceptional Children.** (3) A.S. Prerequisite: Psychology of Exceptional Children or consent of the instructor. Krider
281. **Problems in Acquisition and Organization of Library Materials.** (3) Summer. Staff  
(See Library Science 250.)
282. **Modern Library Practices.** (3) Summer. Staff  
(See Library Science 263.)
283. **History of Books and Development of Libraries in our Civilization.** (3) Summer. Staff  
(See Library Science 290.)
284. **Advanced Student Teaching for Experienced Teachers.** (2-8) A.W.S. Prerequisite: Field experience plus approval of special committee and chairman of department. Staff  
Application should be made in advance.
287. **Administration and Supervision of Student Teaching.** (3) A.W.S. Flandro, Callahan
- 294, 295. **Independent Reading.** (1-3) A.W.S. Staff
- 296, 297. **Seminar.** (1-3) A.W.S. Staff
- 298, 299. **Independent Research.** (1-3) A.W.S. Staff
300. **Thesis for Master's Degree.** Staff
301. **Field Project.** Staff



## Educational Administration

**Professors:** H. G. Clark, J. C. Moffitt, Morrill, Romney, Woolf.

**Associate Professors:** Barnett (acting chairman, 127 McK), Burrup.

**Assistant Professor:** Callahan.

**Instructor:** Hellewell.

### Upper Division Courses

**100. School Organization and Utah School Law. (3) A.W.S.**

Barnett, Moffitt, Burrup

The general system for organizing and administering public education in Utah. Powers of the legislature, state board of education, local school boards, and administrative officers. Formerly Educational Administration 153.

**105. Maintenance and Care of the School Plant. (1-3) A.**

Barnett, Hellewell, Morrill

A practical course for janitors, custodians, building engineers, and their directors.

**194, 195. Independent Readings. (1-3) A.W.S.**

Staff

**196, 197. Seminar. (1-3) A.W.S.**

Staff

**197, 199. Independent Research. (1-3) A.W.S.**

Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

**200. Public School Finance. (3) A.W.**

Barnett, Burrup

**201. Public School Building Programs. (2-3) S.**

Barnett

**203. School Law. (3) W.**

Burrup

**205. Organization and Administration of Public Schools. (3) A.S.**

Burrup

**207. Work Improvement Efficiency in the Public Schools. (2) W.**

H. G. Clark

**209. Personnel Problems of the School Staff. (3) W.**

Barnett

**211. The Elementary School Principalship. (3) S.**

Burrup

**212. The Junior High School. (3) S.**

Callahan, Woolf

**213. The Senior High School. (3) W.**

Woolf

214. **Work of the Secondary School Principal.** (3) W. Burrup
218. **College and University Organization and Administration.** (3)  
(Not given this year.) Staff
225. **Supervision of Education.** (3) S. Prerequisite: One or more  
years of successful teaching. Burrup
- 294, 295. **Independent Readings.** (1-3) A.W.S. Staff
- 296, 297. **Seminar.** (1-3) A.W.S. Staff
- 298, 299. **Independent Research.** (1-3) A.W.S. Staff
300. **Thesis for Master's Degree.** Staff
301. **Field Project.** Staff

## Educational Research and Services

Professors: Egbert (chairman, McKay), Lloyd, Romney.

Associate Professors: M. H. Clark, Isaksen, Reid.

Assistant Professors: Downing, Howell, Krider.

Instructors: V. H. Jensen, Parker\*, Wright.

The offerings and programs in this department are of two kinds: (1) Those which provide teachers and special personnel with the necessary understandings and insights into human behavior and learning, which they will need in working with normal and with exceptional students, and (2) those which promote research and extend educational services to the University and the public schools. They are presented in four divisions: Educational Psychology, Research and Statistics, Educational Tests and Measurements, and Personnel and Guidance.

### Educational Psychology

#### Upper Division Courses

100. **Educational Psychology.** (5) A.W.S. Staff  
 Psychological facts and principles related to the teaching-learning situation.
106. **Mental Hygiene.** (3) S. Prerequisite: Psychology 11 or equivalent. Staff  
 (See Psychology 143.)
110. **Psychological Tests.** (4) W. Prerequisite: Psychology 11 and 113. Howell  
 (See Psychoogy 171.)

#### Graduate Course

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

### Research and Statistics

#### Upper Division Course

115. **Statistical Methods.** (3) A.S. Staff  
 (See Mathematics 152s.)

#### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** grad-

uate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

215. **Advanced Statistics in Education.** (3) S. Prerequisite: Educational Research 115. Staff
218. **Educational Research and Thesis Writing.** (2-3) A.W.S. Staff
219. **Research Techniques in Guidance.** (3) W. Staff

## Educational Tests and Measurements

### Upper Division Course

130. **Educational Tests and Measurements.** (3) A.S. Staff  
The evaluation, construction, and administration of various types of objective and standardized tests.

### Graduate Course

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

230. **Educational Tests and Measurements.** (3) W. Staff

## Personnel and Guidance

### Lower Division Course

45. **Meeting Problems in College Life.** (3) A. Reid, Parker  
A course designed to aid students in making adjustment to college and life situations. Major emphasis is placed on vocational and educational planning, personality development, and social adjustment.

### Upper Division Course

145. **Guidance Service in Public Schools.** (3) A. Romney, Isaksen, Reid  
An introduction to the principles and practices of the guidance program in public schools designed for prospective teachers at both elementary and secondary levels. This course may be applied toward the meeting of certification requirements and is a prerequisite to all graduate courses in Personnel and Guidance.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced

undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

245. **Guidance Services in the Elementary School.** (3) W. Isaksen
246. **Individual Counseling.** (3) W. Prerequisite: Consent of instructor. Jensen, Isaksen, Reid
247. **Group Counseling.** (3) S. Prerequisite: Educational Research 246 or consent of instructor. Reid
248. **Test Techniques in Guidance.** (3) A.S. M. H. Clark, Jensen
249. **Guidance Workshop.** (Arr.) Staff
250. **Administration of Guidance Services in Public Schools.** (3) (Arr.) Romney, Reid, Isaksen
251. **Occupational Information and Counseling.** (3) S. M. H. Clark
252. **Industrial Counseling.** (3) A. Staff
253. **Case Studies in Guidance.** (3) W. Staff
254. **Student Personnel Services in Higher Education.** (3) Lloyd
255. **Internship in Counseling.** (3) (Arr.) Romney, Staff
256. **Internship in Testing.** (3) W. Jensen

### General Courses

#### Upper Division Courses

- 194, 195. **Independent Readings.** (1-3) A.W.S. Staff
- 196, 197. **Seminar.** (1-3) A.W.S. Staff
- 198, 199. **Independent Research.** (1-3) A.W.S. Staff

#### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

- 294, 295. **Independent Readings.** (1-3) A.W.S. Staff
- 296, 297. **Seminar.** (1-3) A.W.S. Staff
- 298, 299. **Independent Research.** (1-3) A.W.S. Staff
300. **Thesis for Master's Degree.** Staff
301. **Field Project.** Staff

## Educational Values and Programs

Professors: Lloyd, Romney, R. B. Swenson.

Associate Professors: M. H. Clark, Reid.

The offerings in this department are intended to lead the student into a critical examination of society for the purpose of establishing attitudes toward education and determining the general outlines of what should be taught in our schools. This requires historical and political perspective, sociological insights, and sound religious and philosophical analysis. From these approaches the courses also deal with education as a professional field, educators as professional members of society, and the roles of non-educators and educators in public education.

The courses are offered in four divisions: Philosophy of Education, History of Education, The School in the Social Order, and Educational Objectives and Programs.

### Philosophy of Education

#### Upper Division Courses

100. **Philosophy of Education.** (3) A.W.S. Lloyd, Romney,  
M. H. Clark

A course designed primarily to assist senior students in the achievement of a basic philosophy of education, growing out of the integrated experiences of university life.

104. **History of Philosophy.** (3) A. Swenson

A history of the rise and development in the Greek, Graeco-Roman, Medieval, Renaissance, Eighteenth Century and Modern periods. Stress is laid upon appreciation of the outstanding philosophers of the various schools of thought.

108. **Social Ethics.** (3) W. Lloyd

A treatment of ethical theory as applied to modern social, industrial, and professional problems. Consideration is given to Puritan ethics, individualism, Christian ethics, international good will, and world peace.

#### Graduate Course

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

208. **Social Ethics.** (3) Lloyd

## History of Education

### Upper Division Courses

115. **History of Education in America.** (3) W. Lloyd, Romney  
The rise and development of the American educational system as it has been affected by changes in American life from the colonial period to the present.
116. **History of Educational Thought.** (3) A. Lloyd, Romney, Parker  
A critical study of the contributions of the outstanding educational thinkers from the early Greeks to the present, and an evaluation of their philosophies.
117. **Comparative Education.** (3) (Not given this year.) Romney, M. H. Clark  
A comparative study of educational systems, ideologies, and philosophies in the Americas, in Europe, and in the Oriental countries.

### Graduate Course

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

217. **Comparative Education.** (3) Romney

## The School in the Social Order

### Lower Division Course

30. **Orientation in Professional Education.** (1) A.W.S. Staff  
A first course in education required of all prospective teachers as a prerequisite to all other education courses.

### Upper Division Course

130. **Education in the Social Order.** (3) Lloyd  
The school as a social institution, with special emphasis upon its relation to social, economic, and political change. The effect of these changes upon educational practice and philosophy of education.

### Graduate Course

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following course carries **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

**230. Education in the Social Order. (3)**

Lloyd

**Educational Objectives and Programs****Upper Division Courses**

(Courses to be announced later)

**Graduate Courses**

(Courses to be announced later)

**General Courses****Upper Division Courses**

<b>194, 195. Independent Readings (1-3) A.W.S.</b>	<b>Staff</b>
<b>196, 197. Seminar. (1-3) A.W.S.</b>	<b>Staff</b>
<b>198, 199. Independent Research. (1-3) A.W.S.</b>	<b>Staff</b>

**Graduate Courses**

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

<b>294, 295. Independent Readings. (1-3) A.W.S.</b>	<b>Staff</b>
<b>296, 297. Seminar. (1-3) A.W.S.</b>	<b>Staff</b>
<b>298, 299. Independent Research. (1-3) 9.W.S.</b>	<b>Staff</b>
<b>300. Thesis for Master's Degree.</b>	<b>Staff</b>
<b>301. Field Project.</b>	<b>Staff</b>

**Electrical Engineering**

(See courses in Engineering Sciences.)



## **Engineering Sciences**

Professors: Bartholomew, H. Fletcher.

Associate Professors: Jonsson (chairman, 290 ESC), Firmage, Fuhriman, Hodson, C. E. Jacob.  
Hodson, C. E. Jacob.

Assistant Professors: Baxter, B. Brown, Simonsen.

This department offers a five-year program leading to the degree of Bachelor of Engineering Science. There are six fields of engineering included, namely: Acoustical, Civil, Chemical, Electrical, Geological, and Mechanical Engineering.

The student completing the prescribed course of study in these fields of engineering science will receive a broad and comprehensive training in engineering, in addition to the general and religious education given to all undergraduate students at Brigham Young University.

### **ENTRANCE REQUIREMENTS**

In addition to having fulfilled the general entrance requirements of the University described on page 71, a student entering the College of Physical and Engineering Sciences should have successfully completed the following high school courses:

- 3 units of English
- 3 units of mathematics
- 1 unit of physical science

Students who have not met these requirements must take extra remedial courses as prescribed by the chairman of the department of his selected major before, or concurrently with, the regular course of studies outlined for his department.

### **COOPERATIVE PROGRAM WITH COLUMBIA UNIVERSITY**

Particularly in engineering fields in which degrees are **not** offered by Brigham Young University, Columbia University will accept candidates for an additional one or two years of scholastic training, after the successful completion of either three or four years of undergraduate work in Engineering Science at Brigham Young University. Prospective candidates should consult the department head for further details.

### **REQUIREMENTS FOR THE BACHELOR OF ENGINEERING SCIENCE DEGREE**

To obtain this degree the student must fulfill the same general educational requirements which apply to the B.S. degree conferred by the Brigham Young University. In addition he must complete the required courses in one field of engineering as described below.

Below is a five-year outline of the courses in the six fields of engineering leading to the Bachelor of Engineering Science Degree. The following abbreviations are used: A.E., for Acoustical Engineering; Ch.E., for Chemical Engineering; C.E., for Civil Engineering; E.E., for Electrical Engineering; G.E., for Geological Engineering; and M.E., for Mechanical Engineering.

### GENERAL EDUCATION GROUP REQUIREMENTS

The General Education Requirements are listed on page 79 together with the elective subjects which the student may select. Among the subjects listed as fulfilling group requirements, it is recommended that engineering science students consider the following:

**Group I:** automatically filled by following the outline for any engineering field listed below.

	<b>Credit Hours</b>
<b>Group II: Biological Science</b> .....	<b>8</b>
Bacteriology 21, General Bacteriology .....	4
Bacteriology 160, Sanitation and Public Health .....	3
Botany 1, General Botany .....	5
Botany 166, Conservation of Resources .....	3
Zoology 11, General Zoology .....	5
Zoology 197, Natural and Human Resources .....	3
<b>Group III: Social Science (History 70 or 80 required)</b> .....	<b>15</b>
Economics 1, Economic Principles .....	5
Economics 161, Labor Problems .....	3
History 70, American Heritage .....	5
Psychology 11, General Psychology .....	5
Psychology 22, Applied Psychology .....	3
Political Science 11, State and Local Governments .....	5
Sociology 11, Introductory Sociology .....	5
Sociology 12, Social Problems .....	5

**Group IV: Humanities and Aesthetics** ..... 15

Any course listed in the general Education Requirements is acceptable. The engineering student will observe that allowance has been made for only 69 hours of general group subjects within the formal program. This implies that the student must usually take advantage of the possibility of cross-referencing six hours of credit between the Humanities and Aesthetics group and the Religion group requirement.

**Group V: Religion** ..... 24

Any course listed in the General Education Requirements is acceptable.

**ENGINEERING SCIENCE REQUIREMENTS****First Year**

(Common to all engineering science courses)

	A.	W.	S.
*Chemistry 14, 15 .....	5	5	0
Mathematics 11, 12, 13: Algebra, Trig., Ana. Geo. ....	5	5	5
English 1, 2, 3, or 11, 12, 13 .....	3	3	3
Religion .....	2	2	2
Physical Education .....	1	1	1
Health Education .....	0	1	0
Group Elective .....	0	0	5
M.E. 1 .....	1	0	0
	<hr/>	<hr/>	<hr/>
Total hours .....	17	17	16

\*Students not having the proper prerequisites may schedule Chemistry 14 and 15 during the winter and spring quarters. Chemical and Geological Engineers will normally schedule Chemistry 16 during Spring Quarter.

**Second Year**

(Common to all Engineering Science Courses)

	A.	W.	S.
Mathematics 91, 92, 93, Calculus .....	4	4	4
Physics 41, 42, 43, General College Physics .....	5	5	5
Religion .....	2	2	2
*Civil Engr., 10, 11, Engineering Graphics .....	2	3	3
*Group Electives .....	4	3	3
	<hr/>	<hr/>	<hr/>
Total hours .....	17	17	17

\*Chemical Engineers will substitute Chemistry 31, 132 for Civil Engineering 10, 11, 12, and the group electives.

**ACOUSTICAL ENGINEERING****Third Year**

	A.	W.	S.
E.E. 141: Electricity and Magnetism .....	0	0	3
Math. 105, 106, 107: Advanced Mathematics .....	3	3	3
E.E. 151, 152, 153: A.C. Circuits .....	3	4	4
E.E. 131, 132: Measurements .....	3	3	0
Geology 2: Engineering Geology .....	0	0	3
Chem. Engr. 177, 178: Engineering Materials .....	0	3	3
Group Electives (Cross reference two hours with religion) .....	5	2	0
Religion .....	2	2	0
	<hr/>	<hr/>	<hr/>
Total hours .....	16	17	16

**Fourth Year**

	A.	W.	S.
E.E. 281: Trans. Lines, Filters, Radio, UHF .....	0	0	4
C.E. 101, 102, 103: Engineering Mechanics .....	5	5	5
E.E. 161, 162, 163: Fundamental Acoustics .....	3	3	3
E.E. 111, 113: D.C. and A.C. Machinery .....	4	4	0
Religion .....	2	0	0
Acoustical Engr. 161: Architectural Acoustics .....	0	0	5
Group Electives (Cross reference four hours with religion) .....	3	3	0
Total hours .....	17	15	17

**Fifth Year**

	A.	W.	S.
A.E. 270, 271, 272: Psycho-Acoustics .....	3	3	3
A.E. 261, 262, 263: Fundamentals Acoustics .....	3	3	3
A.E. 264, 265, 266: Acoustical Measurements .....	2	2	2
E.E. 282, 283: Trans, Lines, Filters, Radio, UHF .....	4	4	0
E.E. 284, 285: Communication Laboratory .....	2	2	0
Group Electives .....	3	0	7
Total hours .....	17	14	15

Restricted Electives which may be taken by approval of the department head include:

	A.	W.	S.
A.E. 267, 268: Advanced Musical Acoustics .....	2	2	0
E.E. 115: A.C. Machinery .....	0	0	4
E.E. 165: Electro-Mechanical Transients .....	0	2	0
E.E. 275: Servomechanisms .....	0	3	0
E.E. 277: Industrial Electronics .....	0	4	0

**CHEMICAL ENGINEERING****Third Year**

	A.	W.	S.
Ch.E. 114, 115, Intro to Chem. Engr. ....	3	3	0
Ch.E. 125: Fuels and Fuel Analysis .....	0	0	2
Ch.E. 161, 162, 163, Physical Chemistry .....	4	4	4
C.E. 10, 11, 12, Engineering Graphics .....	2	3	3
E.E. 101, 102, 103, Elements of Electrical Engineering .....	4	4	4
Group Electives .....	2	0	2
Religion .....	2	2	2
Total hours .....	17	16	17

**Fourth Year**

	A.	W.	S.
Ch.E. 165, 166, 170, Thermodynamics and Unit Operations .....	3	3	3
C.E. 101, 102, 103, Statics, Dynamics, and Strength of Materials .....	5	5	5
Chemistry 151, 152, Organic Chemistry .....	4	4	0
Ch.E. 177, Engineering Materials .....	0	0	3
Group Electives .....	3	3	4
Religion .....	2	2	2
<b>Total hours</b> .....	<b>17</b>	<b>17</b>	<b>17</b>

**Fifth Year**

	A.	W.	S.
Ch.E. 171, 172, 173, Unit Operations .....	3	3	3
Ch.E. 174, 175, 176, Unit Operations Lab .....	2	2	2
Ch.E. 196, Plant Design .....	0	2	0
Ch.E. 179, Chemical Processes .....	0	3	0
Ch.E. 197, Research .....	2	2	1
Restricted Elective .....	0	0	5
Geology 91, Engineering Geology .....	0	0	3
Group Electives .....	8	5	0
<b>Total hours</b> .....	<b>15</b>	<b>17</b>	<b>14</b>

Note: The first and second years are common to all branches of engineering and approximately to all the physical sciences, except that Chemistry 31 and 132 will normally be taken in the second year, being a prerequisite to Chemistry 161.

**CIVIL ENGINEERING****Third Year**

	A.	W.	S.
C.E. 101, 102, 103, Eng. Mechanics .....	5	5	5
*C.E. 120, Surveying I .....	0	0	5
Ch.E. 177, 178, Engr. Materials .....	3	3	0
C.E. 110, Properties of Materials .....	0	0	2
M.E. 130, Mechanisms .....	3	0	0
M.E. 123, Elements of Thermodynamics .....	0	0	5
Geology 91, Engineering Geology .....	0	3	0
Religion .....	2	2	0
Group II Elective .....	0	3	0
Group IV Elective (cross reference with religion) ....	3	0	0
<b>Total hours</b> .....	<b>16</b>	<b>16</b>	<b>17</b>

\*Satisfactory attendance at one week survey camp is required as part of Surveying I.

**Fourth Year**

	A.	W.	S.
Math 104, 105, 106, Advanced Mathematics .....	3	3	3
C.E. 121, Surveying II .....	0	0	5
C.E. 130, Concrete Technology .....	4	0	0
C.E. 140, 141, 142, Structures .....	4	4	4
M.E. 110, Fluid Mechanics .....	0	4	0
Religion .....	0	0	2
Group III Elective .....	5	0	0
Group II Elective .....	0	4	0
	<hr/>	<hr/>	<hr/>
Total hours .....	16	15	14

**Fifth Year**

	A.	W.	S.
C.E. 150, Soil Mechanics .....	3	0	0
C.E. 151, Soil Mechanics Lab. ....	1	0	0
C.E. 160, 161, Hydraulic Design and Hydrology .....	3	3	0
C.E. 170, Civil Engineering Practice .....	0	0	3
E.E. 101, 102, 103, Elements of Electric Engr. ....	4	4	4
C.E. 201, Structures .....	5	0	0
C.E. and Restricted Electives .....	0	5	5
Group III Electives .....	0	5	3
Group IV Elective .....	0	0	2
	<hr/>	<hr/>	<hr/>
Totals hours .....	16	17	17

**Civil Engineering Restricted Electives**

Subject to approval, 10 credit hours of elective subjects shall be selected from the following:

	Hours Credit
Civil Engineering 202, 203: Advanced Structural Design .....	10
Civil Engineering 210, 211: Elasticity & Properties of Materials II .....	10
Civil Engineering 212, 213: Experimental Stress Analysis ....	10
Civil Engineering 220, 221: Surveying & Photogrammetry .....	10
Civil Engineering 230: Concrete Technology II .....	5
Civil Engineering 240: Advanced Hydraulic Design .....	5
Civil Engineering 240, 241, Advanced Hydraulic Design .....	10
Civil Engineering 250, 251: Advanced Soil Mechanics .....	10
Civil Engineering 260: Construction Methods and Equipment ..	5
Civil Engineering 261: Public Health and Sanitation .....	5
Civil Engineering 262: Road Engineering and City Planning ..	5
Psychology 164, 165, 167 .....	9
Business Administration .....	5
Foreign Language .....	10
Advanced Mathematics .....	5
Advanced Geology .....	5

**ELECTRICAL ENGINEERING**

Consult Jens Jonsson (278 PS).

**Third Year**

	A.	W.	S.
E.E. 141, Electricity and Magnetism .....	0	0	3
Mathematics 105, 106, 107, Advanced Mathematics ...	3	3	3
E.E. 151, 152, 153, A.C. Circuits .....	3	4	4
E.E. 131, 132, Measurements .....	3	3	0
Geology 2, Engineering Geology .....	0	0	3
Ch.E. 177, 178, Engineering Materials .....	0	3	3
Group Electives (cross reference 2 hours with religion) .....	5	2	0
Religion .....	2	2	0
<b>Total hours</b> .....	<b>16</b>	<b>17</b>	<b>16</b>

**Fourth Year**

	A.	W.	S.
E.E. 281, Transmission Lines and Filters .....	0	0	4
E.E. 111, 113, 115, D.C. and A.C. Machinery .....	4	4	4
E.E. 161, 162, 163, Electronics .....	3	3	3
C.E. 101, 102, 103, Engineering Mechanics .....	5	5	5
Religion .....	2	0	0
E.E. 165, Electro-Mechanical Transients .....	0	2	0
Group Elective (cross reference with Religion) .....	2	2	0
<b>Total hours</b> .....	<b>16</b>	<b>16</b>	<b>16</b>

**Fifth Year**

	A.	W.	S.
M.E. 123, Thermodynamics .....	4	0	0
M.E. 127, Thermo. ab. ....	1	0	0
M.E. 110, Fluid Mechanics .....	0	0	4
E.E. 282, 283, Comm. Systems, UHF Technics .....	4	4	0
E.E. 284, 285, Communications Laboratory .....	2	2	0
Restricted Electives .....	3	4	6
Group Electives .....	2	6	4
<b>Total hours</b> .....	<b>16</b>	<b>16</b>	<b>14</b>

Restricted Electives which may be taken by approval of the department head include:

Psychology 164, 165, 167: Industrial, Business, & Personnel Psychology .....	3	3	3
Physics 151, 152, 153: Atomic and Nuclear .....	3	3	3
Electrical Engineering 245: Illumination .....	0	0	2
Electrical Engineering 275: Servomechanisms .....	0	3	0
Electrical Engineering 277: Industrial Electronics .....	0	4	0

Acoustical Engineering 261, 262, 263: Fundamentals of Acoustics .....	3	3	3
Electrical Engineering 221: Power Systems .....	0	0	3
Acoustical Engineering 161: Architectural Acoustics .....	5	0	0
Acoustical Engineering 262: Psycho-Acoustics—Speech & Hearing .....	0	5	0
Acoustical Engineering 263: Psycho-Acoustics .....	0	0	3
Electrical Engineering 290: Advanced Laboratory .....	0	0	1
Electrical Engineering 291: Advanced Laboratory .....	0	0	1
Electrical Engineering 292: Advanced Laboratory .....	0	0	1
Electrical Engineering 293: Advanced Laboratory .....	0	0	1

### GEOLOGICAL ENGINEERING

#### Third Year

	A.	W.	S.
Group II, III, Electives .....	3	3	4
Geology 91, 92, Physical and Historical Geology .....	4	4	0
C.E. 122, Surveying .....	0	0	3
Geology 117, 118, 119, Mineralogy, Lithology .....	3	3	3
C.E. 101, 102, 103, Engineering Mechanics (Statics, Dynamics, Materials) .....	5	5	5
Religion .....	2	2	2
Total hours .....	17	17	17

#### Fourth Year

	A.	W.	S.
Group II, IV, Electives .....	5	7	0
Geology 128, 129, 130, Structural Geology, Map and Photo Interpretation, Field Methods .....	5	4	3
Geology 180, Principles of Economic Geology .....	0	0	5
E.E. 101, 102, 103, Elements of Electrical Engineering .....	4	4	4
Religion .....	2	2	2
Total hours .....	16	17	14

#### Summer

Geology 160, Field Camp .....	8 hours
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#### Fifth Year

	A.	W.	S.
Geology 140, 141, Mineral Optics, Petrography .....	5	3	0
G.E. 150, 151, Geophysics .....	0	3	3
Geology 285, Ground Water Geology .....	5	0	0
G.E. 288, Petroleum and Mine Evaluation .....	0	0	3
C.E. 150, Soil Mechanics .....	3	0	0
C.E. 151, Soil Mechanics Laboratory .....	1	0	0
Restricted Electives, (Options) .....	2	5	5
Total hours .....	16	11	11



**Geological Engineering Restricted Electives**

	A.	W.	S.
Geology 115, Geologic Illustration .....	0	0	3
Geology 171, Invertebrate Paleontology .....	5	0	0
Geology 172, Principles of Sedimentology .....	0	3	0
Geology 219, Engineering Geology .....	0	0	4
Geology 250, Advanced Optical Mineralogy .....	5	0	0
Geology 251, Petrography & Petrofabrics .....	0	3-5	0
Geology 252, Igneous and Metamorphic Petrology ....	0	0	5
Geology 273, Sedimentation .....	3	0	0
Geology 274, Sedimentary Petrology .....	0	3	0
Geology 275, Sedimentary Petrography .....	0	2	0
Geology 276, Sedimentation and Stratigraphy .....	0	0	3
Geology 277, Petroleum Geology .....	0	0	5
Geology 278, Subsurface Geology .....	0	2	0
Geological Engineering 279, 280, Oil Field Develop- ment and Production .....	3	2	0
Geology 281, Metalliferous Deposits .....	0	0	5
Geological Engineering 282, Mining Geology .....	3	0	0
Geology 283, Non-Metalliferous Deposits .....	0	3	0
Geology 284, Geology of Ceramic Raw Materials .....	0	0	3
Geological Engineering 286, 287, Geohydrology .....	0	3	3

**MECHANICAL ENGINEERING****Third Year**

	A.	W.	S.
C.E. 101, 102, 103, Engineering Mechanics (Statics, Dynamics, Materials) .....	5	5	5
C.E. 110, Properties of Materials .....	0	0	2
M.E. 120, 121, 122, Thermodynamics and Applications	3	3	3
M.E. 124, Thermodynamics laboratory .....	0	2	0
Math 104, 105, 106, Advanced Mathematics .....	3	3	3
Ch.E. 177, 178, Engineering Materials .....	3	3	0
Ch.E. 125, Fuels and Fuel Analysis .....	0	0	2
Religion (cross reference 3 hours with group electives) .....	3	2	2
Total hours .....	17	18	17

**Fourth Year**

	A.	W.	S.
M.E. 110, Fluid Mechanics .....	4	0	0
M.E. 112, Fluid Dynamics .....	0	3	0
M.E. 133, 134, 135, Kinematics and Machine Design ..	5	4	4
M.E. 141, Heat Transfer .....	0	0	3
M.E. 125, 126, Heat Power Laboratory I, II .....	0	1	1
Geology 91, Engineering Geology .....	0	0	3
Religion (cross reference 3 hours with group electives) .....	2	3	2
Group Electives .....	5	5	4
	z	zz	x
Total hours .....	16	16	15

## Fifth Year

	A.	W.	S.
E.E. 101, 102, 103, Elements of Electrical Engineering	4	4	4
M.E. 230, Vibration Problems in Engineering .....	3	0	0
M.E. 150, Manufacturing Processes .....	0	0	3
M.E. 290, Mechanical Engineering Problems .....	0	0	2
Bus. Adm. 130, Industrial Management .....	0	5	0
Economics 161, Labor Problems .....	3	0	0
Restricted Electives .....	6	6	5
	<hr/>	<hr/>	<hr/>
Total hours .....	16	15	14

## Mechanical Engineering Restricted Electives

	Credit Hours
M.E. 151, Time and Motion Study .....	3
M.E. 152, Production and Quality Control .....	3
M.E. 171, Refrigeration .....	3
M.E. 172, Heating, Ventilating, and Air Conditioning .....	3
M.E. 181, Internal Combustion Engines .....	4
M.E. 183, Steam and Gas Turbines .....	3
M.E. 185, Gas Turbine and Jet Engine Power Plants .....	3
M.E. 187, Power Plant Engineering .....	3
M.E. 210, Fluid Dynamics and Machinery .....	3
M.E. 212, Principles of Aerodynamics .....	3
M.E. 220, Advanced Thermodynamics .....	3
M.E. 221, Advanced Thermodynamics .....	3
M.E. 222, Fuels and Combustion .....	3
M.E. 225, Advanced Heat Transmission .....	3
M.E. 232, Dynamical Problems in Machine Design .....	3

The student will consult the department head for courses in other departments which may be offered as restricted electives.

## Acoustical Engineering Science

Professor: H. Fletcher

- 161. Architectural Acoustics.** (5) W. Prerequisites: Physics 41, 42, 43.

Fundamental behavior of sound in rooms. Effects of shape and size upon the perception of speech and music. Proper use of public address and sound reinforcing systems, sound absorption and insulation properties of different kinds of room walls. Kinds and amounts of sound absorption materials to use in the sound treatments of rooms and auditoriums.

- 261, 262, 263. Fundamentals of Acoustics.** (3-3-3) A.W.S. Prerequisite: Electrical Engineering 163. Three lectures per week.

A three-quarter course on basic principles underlying Acoustical Engineering. The equations of wave motion for plain and spherical waves are developed and then applied to the design of cone and horn types of loudspeakers, microphones, telephone receivers, hydrophones and underwater acoustics, and to reflection, absorption, and transmission of sound at boundary layers.

- 264, 265, 266. Acoustical Measurements.** (2-2-2) A.W.S. Parallel: Acoustical Engineering 261, 262, 263. Two laboratory periods per week.

Laboratory measurements of sound, such as noise surveys, response measurements of microphones, telephone receivers, loudspeakers, tube and reverberations chamber measurements of sound absorption, etc.

- 267, 268. Advanced Musical Acoustics.** (2-2) A.W. Prerequisites: Physics 41, 42, 43; Acoustical Engineering 261, 262, 263. Two lectures per week.

A technical study of the acoustical behavior of the different musical instruments, a consideration of the sound power output of single instruments and ensembles, stereophonic reproduction of music, possibilities of electronic musical instruments.

- 270. Psycho-Acoustics-Speech and Hearing.** (5) W. Prerequisite: Electrical Engineering 163. Five lectures per week.

A study of speech and hearing from a communication engineering viewpoint. A symmetrical analysis of the speech and hearing processes will be developed. The known experimental facts about speech and hearing will be systematically studied and compared with the calculated results.

- 271. Psycho-Acoustics.** (3) S. Prerequisite: Acoustical Engineering 162. Three lectures per week.

Methods of calculating and measuring the articulation index of a talker-listener pair when using any specified type of a communication system.

## Chemical Engineering Science

Associate Professor: Blackham.

Assistant Professor: B. Brown.

(See Chemistry for course descriptions.)

## Civil Engineering Science

Associate Professors: Fuhriman, Hodson.

9. **Engineering Graphics.** (2) A. Prerequisite: Mathematics 11, 12, 13, must be taken concurrently with Mathematics 91, 92, 93. One lecture and drawing office period.  
Materials and instruments in engineering drawing. Introductory practice in orthographic projection. Transfer of pictorial sketches and machine part samples to scaled drawing. Reproduction processes. Drawing principles.
10. **Engineering Graphics.** (3) W. Prerequisite: Civil Engineering 10. Two lecture and drawing office periods.  
Graphic principles, including descriptive geometry. Projections, perspective applications, and developments.
11. **Engineering Graphics.** (3) S. Prerequisite: Civil Engineering 11. Two lecture and drawing office periods.  
Graphical mathematics, empirical equations, nomography. Graphical calculus. Graphic statics.
101. **Engineering Mechanics (Statics).** (5) A. Prerequisites: General Physics and Civil Engineering 10, 11, 12. Three lectures and two problem periods.  
Introductory concepts of mechanics. Force systems and problems of equilibrium applied to structures. Centers of gravity and centroids. Elementary hydrostatics. Friction in engineering problems. Beam problems, virtual work.
102. **Engineering Mechanics (Dynamics).** (5) W. Prerequisite: Civil Engineering 101. Three lectures and two problem periods.  
Definitions and principles of kinematics and kinetics. Engineering applications in terms of force, mass, acceleration, work and energy, impulse and momentum, periodic motion.
103. **Engineering Mechanics (Mechanics of Materials).** (5) S. Prerequisite: Civil Engineering 101. Three lectures and two problem periods.  
Fundamental concepts in terms of elastic stress and strain relations. Riveted and welded joints; cylinders and spheres under pressure. Problems of torsional load. Beam theory including bending stresses, complex stress, calculation of deflection and continuity aspects. Two dimensional elastic theory.

- 110. Properties of Materials.** (2) S. Prerequisite: To be taken concurrently with Civil Engineering 103. One laboratory period.

Theories and procedure of physical testing of materials. Mechanical testing. Introduction to failure theories and rheological behavior of materials. Introduction to the mechanics of deformation.

- 120. Surveying I.** (5) S. Prerequisites: Civil Engineering 10, 11, 12. Three lectures, one field day.

Lectures and field work in measurements of distances, angles, and differences of elevation using the usual survey methods and instruments. Compass and sextant. Preparation of notes. Adjustments. Simple triangulation and traverses. Plane table.

- 121. Surveying II.** (5) S. Prerequisite: Civil Engineering 120. Three lectures, one field day.

More advanced work in survey, precise levelling, tachemetry, reconnaissance and route surveying. Vertical and horizontal curves. Observations for meridian and latitude. Introductory photogrammetry and underground surveying.

- 122. Surveying for Geological Engineers.** (3) S.

Selected lectures from Civil Engineering 120.

- 130. Concrete Technology.** (4) W. Prerequisite: Fourth year standing in Engineering Science. Three lectures, one laboratory period.

Manufacture and testing of cements, technology of concrete materials and concrete mix design. Techniques of concrete handling, placing and treatment. Laboratory work.

- 140. Structures I.** (4) A. Prerequisites: Civil Engineering 103, 110. Two lectures, two drawing office periods.

Theory and design of statically determinate frame structures in steel and timber-loading problems, influence lines, deflection.

- 141. Structures 2.** (4) W. Prerequisite: Civil Engineering 140. Two lectures, two drawing office periods.

Continuation of Civil Engineering 140. Web girders, mill buildings. Column and joint details.

- 142. Structures 3.** (4) S. Prerequisite: Civil Engineering 141. Two lectures, two drawing office periods.

Continuation of Civil Engineering 141. Theory and design of elastic approach to reinforced concrete structures. Proportioning of concrete structures, building code requirements.

- 150. Soil Mechanics.** (3) A. Prerequisite: Civil Engineering 103, Geology. Three lectures.

Properties of soil related to engineering problems. Permeability, capillarity and compressibility related to seepage, uplift and settlement of structures. Shear and bearing factors generally. Cuttings, embankments, and earth dam theories.

- 151. Soil Mechanics.** (1) A. Prerequisite: To be taken concurrently with Civil Engineering 150.  
Laboratory work associated with Civil Engineering 150.
- 160. Hydraulic Design.** (3) A. Prerequisite: Mechanical Engineering 110, 111. Two lectures and one three-hour design laboratory per week.  
Theory and design of water control and water conveyance structures such as dams, pipe-lines, open channels, hydraulic transitions.
- 161. Hydrology.** (3) W. Prerequisite: satisfactory completion of Civil Engineering 160. Two lectures and one three-hour problem laboratory per week.  
A study of water as it occurs in nature. Relationships between precipitation, evaporation, infiltration, transpiration, groundwater, and stream runoff. Methods of collection of hydrologic data, and their use in water resource and flood control studies.
- 170. Civil Engineering Practice.** (3) S. Prerequisite: fifth year standing in Engineering Science.  
A study of engineering problems connected with construction equipment and methods, roads, railways, public health, and sanitation.
- 201. Structures 4.** (5) A. Prerequisite: Civil Engineering 142. Three lectures, two drawing office periods.  
Theory and design of statically indeterminate structures. Redundant frames, strain energy methods, Castigliano's theorems. Slope-deflection equations and relaxation methods. Associated drawing office work.
- 202. Advanced Structural Design.** (5) W. Prerequisite: Civil Engineering 201. Three lectures, two drawing office periods.  
Continuation of Civil Engineering 201. Arch design and continuous trusses. Space frames. Drawing office problems.
- 203. Advanced Structural Design.** (5) S. Prerequisite: Civil Engineering 202. Three lectures, two drawing office periods.  
Continuation of Civil Engineering 202. Plastic theories of structural analysis. Elastic instability and vibrations. Slab problems. Prestressed concrete. Drawing office problems.
- 210. Elasticity and Properties of Materials I.** (5) A. Prerequisites: Civil Engineering 110, Mathematics 104, 105. Three lectures, one laboratory period.  
Advanced theory of elastic and plastic behavior. Complex stress failure and failure theories. Structure of matter as related to stress distribution. Selected experimental work.
- 211. Elasticity and Properties of Materials II.** (5) W. Prerequisite: Civil Engineering 210. Three lectures, one laboratory period.  
Continuation of Civil Engineering 210.

- 212. Experimental Stress Analysis.** (5) A. Prerequisites: Civil Engineering 110, Mathematics 104, 105. Three lectures, one laboratory period.

Certain lectures in Civil Engineering 210 are required. The theory and practice of photoelasticity. Structural similitude, analogies. Selected experimental investigations.

- 213. Experimental Stress Analysis.** (5) W. Prerequisites: Civil Engineering 110, Mathematics 104, 105. Three lectures, one laboratory period.

Continuation of Civil Engineering 212.

- 220. Surveying and Photogrammetry.** (5) A. Prerequisites: Civil Engineering 121, Mathematics 104, 105. Three lectures, one laboratory period.

Geodetic survey theory, economy of survey methods. Astronomical observations. Air survey methods. Mining and geophysical survey techniques. Cartographic work.

- 221. Surveying and Photogrammetry.** (5) S. Prerequisite: Civil Engineering 220. Three lectures, one laboratory period.

Continuation of Civil Engineering 220.

- 230. Concrete Technology II.** (5) S. Prerequisite: Civil Engineering 130. Three lectures, one laboratory period.

Basic behavior of concrete materials, introductory micromeritics, physical behavior of set concretes. Cement additive and replacement compounds applied to concrete performance. Examination of physical and chemical factors. Special techniques.

- 240. Advanced Hydraulic Design.** (5) W. Prerequisites: Civil Engineering 142, 160, and 161. Three lectures and two three-hour design laboratories per week.

Planning and basic design of hydro-electric, flood control, irrigation, and multi-purpose projects involving the utilization of water resources. Consideration of hydraulic and hydrologic design elements.

- 241. Advanced Hydraulic Design.** (5) S. Prerequisite: Civil Engineering 240. Three lectures, two project periods.

Continuation of Civil Engineering 240.

- 250. Advanced Soil Mechanics.** (5) W. Prerequisites: Civil Engineering 150, Mathematics 104, 105. Two lectures, two laboratory periods.

Revision and extension of theories of soil behavior. Foundations, tunnels and arching problems, stability of slopes, stabilization.

- 251. Advanced Soil Mechanics.** (5) S. Prerequisite: Civil Engineering 250. Two lectures, two laboratory periods.

Continuation of Civil Engineering 250.

260. **Construction Methods and Equipment.** (5) A. Prerequisite: Fifth year standing in Engineering Science. Three lectures, one project period.  
Analysis of construction procedure. Cost estimating, job planning, capacity of plant, operating schedules and costs.
261. **Public Health and Sanitation.** (5) W.S. Prerequisite: Fifth year standing in Engineering Science. Two lectures, two project periods.  
Review of public health engineering. Application to design, construction and operation of water supply and sewerage systems.
262. **Road Engineering and City Planning.** (5) W.S. Prerequisite: Fifth year standing in Engineering Science. Two lectures, two project periods.  
Design and construction practice in highways and ancillary works. Fundamentals of city planning.

### Electrical Engineering Science

Professor: Bartholomew

Associate Professor: Jonsson

- 101, 102, 103. **Elements of Electrical Engineering.** (4-4-4) A.W.S. Prerequisites: Physics 41, 42, 43. Three lectures and one three-hour laboratory period per week.  
Designed for students not majoring in electrical engineering. A study of direct and alternating current theory and machinery, and electronics.
111. **Direct-Current Machinery.** (4) A. Prerequisites: Electrical Engineering 153. Three lectures and one three-hour laboratory period per week.  
A study of direct-current motors, generators, power distributors, applications.
- 113, 115. **Alternating-Current Machinery.** (4-4) W.S. Prerequisites: Electrical Engineering 111, 153. Three lectures and one three-hour laboratory period per week.  
Single and polyphase transformers; alternating-current motors and generators; applications.
- 131, 132. **Electrical Measurements.** (3-3) W.S. Prerequisites: Physics 41, 42, 43 and Electrical Engineering 151, 152, to be taken concurrently. Two lectures and one two-hour laboratory period per week.  
A study of the theory, use, limitations, accuracy, and calibration of electrical instruments including bridges, recorders, indicators, and standard electrical meters.
141. **Electricity and Magnetism.** (3) S.  
A study of static and dynamic electric and magnetic fields; both classical and vector mathematics will be employed.



- 151. Alternating-Current Circuits.** (3) A. Prerequisites: Physics 42, Mathematics 103. Three lectures per week.

Steady-state alternating current circuits; vectors; complex algebra; series and parallel impedance networks; resonant circuits; non-sinusoidal waves; Fourier analysis.

- 152, 153. Alternating-Current Circuits.** (4-4) W.S. Prerequisite: Electrical Engineering 151. Three lectures per week and one three-hour laboratory period per week.

Series-parallel networks; coupled circuits; polyphase circuits; vector loci; network theorems; symmetrical components; elementary filters.

- 161, 162, 163. Electronics.** (3-3-3) A.W.S. Prerequisites: Electrical Engineering 153. Two lectures and one three-hour laboratory period per week.

A study of electron dynamics; vacuum tube characteristics, rectifiers, amplifiers, oscillators, modulators, demodulators, and special purpose tubes.

- 165. Electro-Mechanical Transients.** (2) A. Prerequisite: Mathematics 106, Civil Engineering 10, Electrical Engineering 111, 113, 153. Two lectures per week.

Application of the classical, operator, and La Place transform methods in determining behavior of electrical and electro-mechanical elements under transient conditions.

- 221. Power Systems.** (3) S. Prerequisite: Electrical Engineering 113. Three lectures per week.

A study of power distribution and system protection.

- 245. Illumination.** (2) S. Prerequisite: Electrical Engineering 153. Two lectures per week.

A study of the principles and design of artificial illumination for various applications; lamp characteristics; measurements; costs. (Not offered in 1955-56.)

- 275. Servomechanisms.** (3) W. Prerequisite: Electrical Engineering 153, 163; Mathematics 106. Three lectures per week.

Theory and application of electrical and electro-mechanical automatic control systems.

- 277. Industrial Electronics.** (4) S. Prerequisites: Electrical Engineering 163. Three lectures and one three-hour laboratory period per week.

Applications of electronics to industrial use. Rectification; electronic control; electronic measurements; dielectric heating; welding; etc.

- 281. Transmission Lines and Filters.** (4) A. Prerequisite: Electrical Engineering 153. Four lectures per week.

The general transmission line; transmission networks; filter theory.

- 282. Communication Systems.** (4) W. Prerequisites: Electrical Engineering 163, 281. Four lectures per week.

Circuits and systems used in television, radar, and radio engineering.

- 283. U.H.F. Technique.** (4) S. Prerequisite: Electrical Engineering 283. Four lectures per week.

Lines, wave guides, antennas, wave propagation, generators.

- 284, 285. Communications Laboratory.** (2-2) A.W. Parallels Electrical Engineering 281, 283, 285. Two three-hour laboratory periods per week.

Devoted to building and testing circuits studied and designed in parallel theory courses.

- 290, 291. Advanced Laboratory** (1-1) S. Prerequisite: Electrical Engineering 285.

Each of these courses constitute a block of ten required experiments in the area of U.H.F. Techniques, Electronic Circuits, Communication Systems, Pulse Forming Networks, Transmission Lines, and Filters. The student may register for either course or both courses simultaneously.

- 292, 293. Advanced Laboratory.** (1-1) S. Prerequisite: Electrical Engineering 285.

Each of these courses constitute a block of ten required experiments in the area of Machinery Control Systems. Machinery Characteristics, and Power Distribution Methods. The student may register for either course or both courses simultaneously.

## Geological Engineering Science

Consult H. J. Bissell (291 ESC)

(See Geology for course descriptions.)

## Mechanical Engineering Science

Assistant Professors: Baxter, Simonson.

- 1. Engineering Orientation.** (1) A.W.S. One lecture per week.  
An introduction to the fields and profession of Engineering. Required for all freshman engineering students.
- 110. Fluid Mechanics.** (4) A.W.S. Three lectures and one three-hour laboratory per week. Prerequisites: Math 93, Civil Engineering 102, Mechanical Engineering 120 or 123.  
Physical properties of fluids; fluid statics; viscous flow; dimensional analysis; incompressible flow; compressible flow; fluid meters; lift and drag; dynamic similarity; momentum, fluid machinery.
- 112. Fluid Dynamics.** (3) W. Three lectures per week.  
A continuation of Mechanical Engineering 110.

- 120, 121, 122. Thermodynamics I, II, III.** (3-3-3) A.W.S. Prerequisites: Mathematics 93, Physics 42. Three lectures per week.

First law and applications, thermodynamic systems, properties of gases, liquids, and vapors. Second law and applications, entropy; properties of gaseous mixtures, fluid flow; combustion; gas and vapor cycles and applications to machinery; refrigeration; compression of gases; air-water vapor mixtures.

- 123. Elements of Thermodynamics.** (4) A. Daily lectures. Prerequisites: Mathematics 103, Physics 42.

First and second laws; properties of systems; thermodynamics of gases and vapors; applications to thermodynamic cycles. Designed for students not majoring in mechanical engineering.

- 124. Thermodynamics Laboratory I.** (2) S. One hour lecture and three hours laboratory per week. Prerequisite: Mechanical Engineering 120.

Instruments for measuring pressure, temperature, speed, power, and area; flow meters; technical report writing.

- 125. Heat Power Laboratory I.** (1) W. One three-hour laboratory period per week. Prerequisites: Mechanical Engineering 121, 124.

Steam turbines; internal combustion engines; heat transfer; pumps; calorimetry; air compressors, refrigeration; steam generators; technical reports.

- 126. Heat Power Laboratory II.** (1) S. One three-hour laboratory per week.

A continuation of Mechanical Engineering 125.

- 127. Elements of Thermodynamics Laboratory.** (1) A. One three-laboratory period per week.

Laboratory to accompany or follow Mechanical Engineering 123.

- 130. Mechanisms.** (3) A. Two lectures and one three-hour laboratory per week. Prerequisite or parallel: Civil Engineering 101.

Motions and velocities of machine parts. For students not majoring in Mechanical Engineering.

- 133. Kinematics of Machines.** (5) A. Three lectures and two three-hour laboratories per week. Prerequisite: Civil Engineering 102.

Velocities and accelerations in machine parts; rolling contact; cams, gearing, flexible connectors, etc.

- 134, 135. Machine Design.** (4-4) W.S. Three lectures and one three-hour laboratory per week. Prerequisites: Mechanical Engineering 133 and Civil Engineering 103.

Theory and design of machine elements; proportioning of machine parts according to the laws of mechanics and engineering materials.

141. **Heat Transfer.** (3) S. Three lectures per week. Prerequisites: Mechanical Engineering 122, Mathematics 105.

Fundamental principles of heat transfer by conduction, convection, and radiation.

150. **Manufacturing Processes.** (3) S. Two lectures and one three-hour laboratory per week.

An introduction to the processes involved in industrial production; laboratory includes field trips to industrial plants in the area.

151. **Time and Motion Study.** (3) Two lectures and one laboratory per week.

Principles of motion economy, techniques of motion and time study and their interrelationship.

152. **Production and Quality Control.\*** (3) Three lectures per week.

Basic concepts of quantitative and qualitative control in industrial organizations of both manufacturing and service types. To include principles of materials-handling affecting the above concepts.

171. **Refrigeration.\*** (3) Three lectures per week. Prerequisite: Mechanical Engineering 122.

Cycles and analysis; selection of systems and component parts; estimation of loads.

172. **Heating, Ventilating and Air Conditioning.\*** (4) Daily lectures. Prerequisite: Mechanical Engineering 122.

Heating and cooling for comfort. Design of warm air, hot water and steam heating systems for residences and commercial buildings.

181. **Internal Combustion Engines.\*** (4) Three lectures and one laboratory per week. Prerequisite: Mechanical Engineering 122.

Basic principles; theoretical and actual cycles; performance characteristics.

183. **Steam and Gas Turbines.\*** (3) Three lectures per week. Prerequisites: Mechanical Engineering 112, 122.

Analysis and design of nozzles, blades and other components of steam and gas turbines; cycle analysis.

185. **Gas Turbine and Jet Engine Power Plants.\*** (3) Three lectures per week. Prerequisites: Mechanical Engineering 112, 122.

Analysis of cycles and performance of gas turbine, jet engine and rocket propulsion systems, including flow through component parts.

187. **Power Plant Engineering.\*** (3) Three lectures per week. Prerequisite: Mechanical Engineering 122.

Analysis of power plants, including performance of prime movers, economics, and heat balance studies.

- 210. Fluid Dynamics and Machinery.\*** (3) Three lectures per week. Prerequisites: Mechanical Engineering 112 and Mathematics 105.

Steady and unsteady flow of compressible and incompressible fluids; principles of operation of fluid dynamical machinery.

- 220. Advanced Thermodynamics.\*** (3) Three lectures per week. Prerequisite: Mechanical Engineering 122 and Mathematics 105.

Extended treatment of the fundamentals of thermodynamics including transient conditions, equilibrium, combustion and real gases.

- 221. Fuels and Combustion.\*** (3) Three lectures per week. Prerequisite: Mechanical Engineering 122.

Properties of fuels; characteristics of air-fuel mixtures; combustion characteristics; calculations.

- 225. Advanced Heat Transmission.** (3) Three lectures per week. Prerequisite: Mechanical Engineering 141.

An extension of Mechanical Engineering 141 to include numerical and approximate methods of solution, transient problems, and solution of problems by analogy methods.

- 230. Vibration Problems in Engineering.** (3) A. Three lectures per week. Prerequisites: Mathematics 105, Civil Engineering 103.

Fundamentals of vibrations and application to machine and structural members.

- 232. Dynamical Problems in Machine Design.\*** (3) Three lectures per week. Prerequisite: Mechanical Engineering 135 and 230.

Methods for determining dynamic characteristics of mechanisms; design of devices for specific velocities and accelerations under given force systems.

- 290. Mechanical Engineering Problems.** (2) W. Two lectures per week. Prerequisite: Fifth year standing.

Selected problems from the field which will enable the student to integrate his fundamental knowledge in their solution.

\*Courses marked with an asterisk offered upon approval of department head.

## English

Professors: Barker, Christensen, Young\*.

Associate Professors: Rice (chairman, 306 McK), Britsch, Carroll (emeritus), Cheney, D. B. Farnsworth, E. L. Hart, B. S. Jacobs, Spears.

Assistant Professors: B. B. Clark, Craig, Larson\*, Monson, Rich, Tanner, Thomas.

Instructors: Burmingham, M. J. Clark\*, Dunn (emeritus), Esplin, D. L. Evans, McKendrick, Oaks, Olson, Smart, Thomson, Waterstradt, West\*, Wood.

### SCOPE OF INSTRUCTION

The English department offers courses in English language, English literature, and general and comparative literature. For convenience, the courses in general and comparative literature are brought together.

### REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

Students who elect their major in English are required to complete thirty-six hours of work in English in addition to English 1, 2, 3. The following program of study is prescribed: (1) twenty hours from courses 130, 131, 132, 135, 136, 171, 172, 173, 174, 175, twelve of which must be in English literature and eight in American; (2) six hours from courses 133, 134, 183, 184, 185, 186, 187, 188, 189, 190; (3) four hours from courses 181, 197; (4) four hours from courses 82, 182; (5) three hours from courses 22, 32, 102. Twenty-four hours in one foreign language are required. The following courses in other departments are recommended: History 20, 21, 140, 141; Psychology 11; and Linguistics 60.

Courses 41, 42, 43, 71, 72, 73 are not open to students who elect their major in English. For students who minor in English and who may teach the subject the department recommends the following as a minimum program: 21, 22, 41, 42, 43, 71, 72, 73, 82, or 182.

Students making English a minor and desiring the recommendation of the department to take secondary training in English must show satisfactory credit in courses 21 and 22 or their equivalent.

### THE "TEACHING MAJOR" IN ENGLISH

The requirements for the "teaching major" in English and for the regular major are the same except that the foreign language requirements may be reduced or waived by the department to meet the special needs of some prospective teachers.

Such reductions or waivers would necessitate, of course, the substitution of the Bachelor of Science degree for the degree of Bachelor of Arts.

English is one of the subjects comprising the composite major in Language Arts designed for prospective teachers.

### PLACEMENT TEST FOR FRESHMAN ENGLISH

In Freshman English, consideration is given to the individual needs of students. To determine these needs all freshmen are required to take a placement test at the time of registration. Assignments to classes are made after this test. Students who place high in the test are required to take English 11, 12, 13; all other students, with the exception of those who need special help, are required to take English 1, 2, 3. Those who need special help are required to take English 1a.

#### Lower Division Courses

- x. Remedial Reading.** (0) A.W.S. M. J. Clark  
A non-credit service course to meet from 3 to 5 hours per week, depending on group and individual needs. This course is designed to utilize modern clinical methods in developing reading speed and comprehension.
- 1a. Composition and Literature.** (3) A. Staff  
Registration in this course will be determined by placement test. (See English 1, 2, 3.)
- 1, 2, 3. Composition and Literature.** (3-3-3) A.W.S. Staff  
Freshman English. Review of grammar, study of principles of composition, theme writing, and reading in literature. (English 2 will not be offered in the autumn, English 3 in the winter, or English 1 in the spring.)
- 4. Business English.** (3) A.W. Prerequisites: English 1, 2, 3. (See Secretarial Training 31.)
- 5. English for Foreigners.** (3-3-3) A.W.S. Barker  
A course intended for foreign students who are learning English.
- 11, 12, 13. Composition and Literature.** (3-3-3) A.W.S. Staff  
Advanced sections of Freshman English. Enrollment determined by results of placement test. No student who has had English 1, 2, 3 should register for English 11, 12, 13. (English 12 will not be offered in the autumn, English 13 in the winter, or English 11 in the spring.)
- 21. Advanced English Grammar.** (4) A.W. Prerequisites: English 1, 2, 3. West, Britsch  
A descriptive and analytical study of present-day English grammar, emphasizing syntax, forms, and usages.

22. **Advanced Rhetoric and Composition.** (3) A.W.S. Prerequisites: English 1, 2, 3, or 11, 12, 13. Larson, Cheney, Hart, Monson  
The problems of developing precision and style in writing, and of presenting factual material effectively. Frequent themes. Required readings.
24. **Classic Myths.** (3) A. Burmingham  
A study of Greek, Roman, and Teutonic myths with special reference to their literary use.
30. **Introduction to Semantics.** (3) S. Thomas  
Function of words in written and spoken communication.
31. **Vocabulary Building.** (4) A.W.S. Young, Monson, McKendrick  
Developing an effective vocabulary through assiduous study of prefixes, suffixes, and roots.
32. **Short Story Writing.** (3) S. Prerequisites: English 1, 2, 3. Cheney
41. **Masterpieces of American Literature.** (2) A. (GER-HA)  
M. J. Clark, Thomson, Wood  
Selected readings in American Literature from colonial times to Emerson. Emphasis is placed on such writers as Franklin, Poe, Hawthorne, and Emerson.
42. **Masterpieces of American Literature.** (2) W. (GER-HA)  
M. J. Clark, Thomson, Wood  
Selected readings in American Literature from Thoreau to Mark Twain. Emphasis is placed on such writers as Thoreau, Melville, Whitman, and Mark Twain.
43. **Masterpieces of American Literature.** (2) S. (GER-HA)  
M. J. Clark, Thomson, Wood  
Selected readings in American Literature from about 1890 to the present.
44. **Modern American Poets.** (2) S. (GER-HA) Britsch  
Selected writings of the major American poets since 1900.
45. **Contemporary American Short Story Writers.** (3) A. (GER-HA) Cheney
47. **The West in American Literature.** (3) (Not given this year.) (GER-HA) Larson
71. **Masterpieces of English Literature.** (2) A. (GER-HA)  
Tanner, Oaks, Cheney  
Includes selections from the folk epic Beowulf, from Chaucer's Canterbury Tales, from the Middle English Folk ballads, and from Shakespeare's plays and sonnets.
72. **Masterpieces of English Literature.** (2) W. (GER-HA)  
Tanner, Oaks, Cheney  
Includes selections from the Seventeenth Century lyrics and from the works of John Milton, John Dryden, Alexander Pope, Jonathan Swift, Thomas Grey, William Blake, and Robert Burns.



- 73. Masterpieces of English Literature.** (2) S. (GER-HA) Tanner, Oaks, Cheney  
Includes selections from the works of Wordsworth, Coleridge, Byron, Shelley, Keats, Tennyson, Browning, Arnold, Hardy, Yeats, and Eliot, and from the great English novels of the Eighteenth, Nineteenth, and Twentieth Century.
- 75. Masters of the English Short Story.** (3) S. (GER-HA) B. Clark
- 82. Shakespeare.** (4) A. (GER-HA) Young  
This is an extensive course in Shakespeare, as opposed to 182, the intensive course. The purpose of the course is to give an overview of Shakespeare's work. The study will include short poems and about sixteen of the most widely known plays: comedies, history plays, and the major tragedies.

### Upper Division Courses

- 102a, 102b, 102c. Advanced Creative Writing.** (1-4) A.W.S.  
Prerequisite: permission of instructor.  
102a: Essay Writing. Lee  
102b: Fiction Writing. Cheney  
102c: Poetry and Drama Writing. Larson  
Workshop meetings; private consultations according to needs of the student.
- 107, 108, 109. (1-3, 1-3, 1-3) Individual Study in English.** A.W. S. Prerequisite: English 1, 2, and 3, or their equivalent, or the consent of the department. Staff  
These courses are offered to meet special needs, and are not for general use.
- 114. Origin and Development of the Essay.** (3) W. (GER-HA) Lee
- 115. Contemporary Essay.** (3) A. (GER-HA) Lee
- 121. English Poetry: Tennyson to Hardy.** (3) A. (GER-HA) May  
be substituted by English majors for English 175. B. Clark
- 122. Modern English Poetry.** (3) W. (GER-HA) B. Clark  
Selected writings of the major English poets since 1900.
- 130. The Colonial Mind in American Literature.** (4) A. (GER-HA) Staff  
Germinal ideas of American culture in the writings of the Puritans and other colonials from Smith to Edwards.
- 131. The Age of Reason in American Literature.** (4) W. (GER-HA) Staff  
The writings of Franklin, Paine, Jefferson, and others of the Enlightenment.

132. **Nationalism and Romanticism in American Literature.** (4) S. (GER-HA) Staff  
Selected writings of Irving, Cooper, Bryant, Longfellow, Lowell, Holmes, Poe, Whittier, Parkman, and Lincoln.
133. **American Renaissance: Emerson, Thoreau, Hawthorne.** (3) W. (GER-HA) Thomas
134. **American Renaissance: Whitman and Melville.** (3) S. (GER-HA) Jacobs
135. **The Rise of Realism and Naturalism in American Literature.** (4) A. (GER-HA) Jacobs
136. **American Literature Since 1914.** (4) W. (GER-HA) Jacobs
141. **American Civilization.** (4) (Not given this year.) (GER-HA) Jacobs  
A study of source writings significant in the social, economic, and political scene of America before 1865.
142. **American Civilization.** (4) (Not given this year.) (GER-HA) Jacobs  
A study of source writings significant in the American scene after 1865.
143. **The American Novel to Dreiser.** (4) W. (GER-HA) Jacobs
144. **The Modern American Novel.** (4) S. (GER-HA) Jacobs
146. **Modern American Drama.** (3) S. (GER-HA) Rich
162. **Modern British Drama.** (3) W. (GER-HA) Rich
163. **Current Drama.** (3) A. (GER-HA) Waterstradt  
A study of plays—American, English, and Continental—since World War II.
171. **Medieval Literature.** (4) W. (GER-HA) Christensen
172. **English Literature from 1500-1660.** (4) W. (GER-HA) Young  
A study of major trends in non-dramatic poetry and prose of the English Renaissance.
173. **English Literature from 1660-1780.** (4) A. (GER-HA) Rice
174. **English Literature from 1780-1832.** (4) W. (GER-HA) B. Clark
175. **English Literature from 1832-1900.** (4) S. (GER-HA) Hart
181. **Chaucer.** (4) W. (GER-HA) Christensen
182. **Shakespeare.** (4) W.S. (GER-HA) Christensen
183. **Milton.** (3) S. (GER-HA) Christensen
184. **Wordsworth and Coleridge.** (3) (Not given this year.) (GER-HA) B. Clark
185. **Tennyson.** (3) W. (GER-HA) Britsch

186. **Browning.** (3) S. (GER-HA) Britsch
187. **Mathew Arnold.** (3) S. (GER-HA) Christensen
188. **Samuel Johnson.** (3) A. (GER-HA) Hart
189. **Byron, Shelley, and Keats.** (3) S. (GER-HA) Farnsworth
190. **Pope and Dryden.** (3) W. (GER-HA) Rice
192. **The English Novel to 1832.** (4) S. (GER-HA) Rice  
The history of English prose fiction to the beginning of the Victorian Period.
193. **The English Novel from Dickens to Hardy.** (4) S. (GER-HA)  
B. Clark
194. **The Modern English Novel.** (4) A. (GER-HA) B. Clark
197. **The History of the English Language.** (4) S. Christensen

## General and Comparative Literature

### Lower Division Courses

50. **Introduction to Literature.** (4) A.W.S. (GER-HA)  
Christensen, Tanner, Farnsworth  
A study of the various types of literature—the short story and novel, poetry, the essay, biography, and drama—with a critical reading and analysis of significant examples of each type.
51. **Introduction to Drama.** (4) A. (GER-HA) Tanner  
An introduction to the history of drama and some of its forms—tragedy, comedy, farce, melodrama, and the modern problem play—with a critical reading and interpretation of famous examples of each type, the major emphasis being on great comedies and tragedies.
52. **Introduction to Contemporary Literature.** (4) W. (GER-HA)  
Hart
53. **Masters of the Drama, Ancient to Modern.** (3) A. (GER-HA)  
Craig  
The origin of the drama with emphasis on the Greek and Roman dramatist.
54. **Masters of the Drama, Ancient to Modern** (3) W. (GER-HA)  
Craig  
Medieval, Renaissance, and early modern drama, both continental and English.
55. **Masters of the Drama, Ancient to Modern.** (3) S. (GER-HA)  
Craig  
Modern drama—continental, English, and American—stressing its national character and the influence of earlier drama on the modern.

## Upper Division Courses

150. **The Renaissance in European Literature.** (3) A. (GER-HA) Spears  
 Discussion and readings of the works of the European Renaissance, including selections from Montaigne, Boccaccio, Ariosto, Shakespeare, and Cervantes.
151. **Neo-Classicism in European Literature.** (3) W. (GER-HA) Spears  
 Discussion and readings of the works of the Seventeenth and Eighteenth Centuries in Europe, including Moliere, Voltaire, Swift, Samuel Johnson, and Lessing.
152. **Romanticism in European Literature.** (3) S. (GER-HA) Spears  
 Discussions and readings in the Romantic Period, including works by Shelley, Wordsworth, Goethe, and Victor Hugo.
157. **Modern European Short Story.** (3) W. (GER-HA) Cheney
158. **Modern Short Biography.** (4) S. (GER-HA) Young  
 Study of about thirty short biographies of famous statesmen, patriots, adventurers, scientists, inventors, painters, writers, and others, including Hitler, Napoleon III, George III, Edison, Wilson, Jefferson, Lincoln, John Brown, Goethe, Gauguin, the Curies, and Dolly Madison.
161. **Modern European Drama.** (3) A. (GER-HA) Rich
164. **The Bible as Literature.** (3) A. (GER-HA; GER-R) Thomas
165. **World Classics.** (3) A. (GER-HA) Britsch  
 Greek epic and tragedy: The works of Homer, Aeschylus, Sophocles, and Euripides in modern translations.
166. **World Classics.** (3) W. (GER-HA) Britsch  
 Latin and Italian epic: *The Aeneid* and *Divine Comedy* in modern translation.
167. **World Classics.** (3) S. (GER-HA) Britsch  
 European masterpieces of the modern era: selected works of Goethe, Schiller, Voltaire, Balzac, Flaubert, Pushkin, Turgenev, Tolstoy, Ibsen, and others in modern translation.
169. **Poetry.** (3) (Not given this year.) Larson  
 A technical study of versification, forms, and theories of poetry.
191. **English and American Folk Song.** (3) S. (GER-HA) Cheney  
 English and Scottish ballads and American folk song.
198. **The Criticism and Appreciation of Literature.** (4) S. (GER-HA) Christensen  
 A study of critical theories and standards of value.
199. **The Spirit of Tragedy in Literature.** (4) (Not given this year.) (GER-HA) Christensen

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- |  |                      |
|--|----------------------|
| 201. Problems in Thesis Writing. (0) A.W.  | Rice                 |
| 227. Victorian Social Critics. (4) (Not given this year.)  | Farnsworth           |
| 247. Seminar in American Literature. (4) A.  | Jacobs               |
| 260. English Drama to 1642. (4) A.   | Young                |
| 264. Restoration and Eighteenth Century Drama. (4) W. (Not given this year.)                       | Rice                 |
| 273. Age of Enlightenment in England. (4) W.   | Rice                 |
| 274. Seminar in Romanticism. (4) S.  | B. Clark, Farnsworth |
| 293. The 19th Century English Novel. (4) S.  | B. Clark             |
| 295. Old English. (4) W.   | Young                |
| 296. Middle English. (4) S.  | Monson, Christensen  |
| 298. Problems in Literary Criticism. (4) S. Prerequisite: English 198 or permission of instructor. | Hart                 |
| 299. Beowulf. (3) S. Prerequisite: English 295.  | Rice                 |
| 300. Thesis for Master's Degree.   | Staff                |

### Entomology

(See Department of Zoology and Entomology.)

## Family Living

Co-deans: Pfund and ————— (211 E and 225 ESC)

The University believes that educated men and women should have breadth in knowledge and understanding. As a guide toward such attainments a basic unit of 84 credit hours, selected from a wide variety of subjects, is required for graduation. This General Education group includes: Physical Sciences, 9 hours; Biological Sciences, 8 hours; Social Sciences, 15 hours; Humanities, 15 hours; Religion, 24 hours; English Composition, 9 hours; and Physical Health and Education, 4 hours. (p. 79).

A minimum of 186 credit hours is required for graduation from the University: at least 45 hours must be completed in residence; at least 60 hours must carry upper-division credit (courses marked 100 or above); a major of at least 30 hours and a minor of at least 20 hours shall be included. The successful completion of the program leads to a Bachelor of Science degree. If 24 hours of college credit in a foreign language is acquired, a Bachelor of Arts degree may be awarded.

A student who wishes to graduate from the College of Family Living shall complete the University requirements, together with a minimum of 60 credit hours of work selected from among the offerings of the various departments within the College. These departments are:

- Clothing and Textiles
- Economics and Management of the Home
- Food and Nutrition
- Homemaking Education
- Housing and Design.
- Human Development and Family Relationships

A student may complete a major in the department of Clothing and Textiles, or Food and Nutrition, or Human Development and Family Relationships, or in the combined departments of Economics and Management of the Home and Housing and Design by selecting 30 or more credit hours of appropriate work in these departments. A combined major and minor may be completed in the broad field of Family Living. The latter, when including the courses given in the department of Homemaking Education and selected courses in the department of Instruction in the College of Education, lead to certification for the teaching of Homemaking.

A student carrying major work within or without the College may complete a minor in any one of the departments of the College by selecting 20 or more credit hours of appropriate work. This shall include at least three courses which carry upper-division credit. A student registered in the College may complete a minor in any department of the University outside of the College. Minors in related departments such as Art, Chemistry, Journalism, Marketing, or Speech are particularly useful in preparing for professional work.

Any student in the University who is not a member of the College of Family Living may select a minor in the college by electing 20 or more credit hours of work from among the courses listed below. At least 6 hours must carry upper division credit.

Clothing and Textiles 10 or 20 (2), 15 (3), 60 (3), 125 (3), 130 (3) or 140 (3), 170 (2).

Economics and Management of the Home 130 (3), 170 (4).

Food and Nutrition 5 (3) or 10 (4) and 40 (4); or 10, 115 (3) and 140 (4).

Housing and Design 45 (3) or 145 (3), 160 (2), 175 (3).

Human Development and Family Relationships 40 (3), 105 (3) or 115 (3), 142 (3)—all approved for the GER-SS group; 85 (2), 150 (3).

Each student who is carrying a major in the College of Family Living or in any department of the College shall elect two specified groups of courses, A from without, and B from within the College.

The courses in group A, in addition to serving as general education, provide a background for work in the College of Family Living; thus, they should be elected in the freshman and sophomore years. The courses in group B will help familiarize the student with some work in all departments of the College, a desired objective since all are involved in the activities of the home.

#### A. Courses in departments outside of the College:

GER-PS: Chemistry 2 and 3, or their equivalent, and Physics 10. (Chemistry 4 is strongly recommended. By special arrangement Geology 1 may be substituted for Physics 10.)

GER-BS: Bacteriology 21 and Zoology 48.

GER-SS: Economics 1 and Psychology 11.

Art 10 (GER-HA) and one other course in Art, or Horticulture 3 or 12.

#### B. Courses in departments within the College:

Clothing and Textiles 10 or 15 or 20, and 60.

Economics and Management of the Home 125 or 130.

Food and Nutrition 10.

Housing and Design, one course.

Human Development and Family Relationships 40 (GER-SS), and 105 (GER-SS) or 115 (GER-SS) or 150.

Each student registered in the college has a faculty advisor who will give guidance and help in the selection of courses and the planning of a desirable schedule. The advisor will also check the student's academic progress and help him use the resources of the university to the greatest advantage.

The following schedule is suggested for the student who wishes to major in the broad field of Family Living, or who is uncertain as to the department in which she wishes to major, or who plans to teach Homemaking, or to enter the field of extension service, home demonstration work or journalism related to the home and family. Education courses will be elected only by prospective teachers. Insofar as possible, students planning to teach should elect the courses the first year they are listed.

We hope that all students will be able to complete a four-year program. If emergencies arise which make such a plan impossible, the first year program is planned so that the student gains some experience in all areas of homemaking as well as in general education.

Freshman Year		Credits	Clothing & Textiles	
Religion .....	6		5 <sup>2</sup> , 10, 15 .....	2 to 5
English 1, 2, 3 .....	9		Econ. & Mgt. of the Home 30 <sup>1</sup> .....	3
Phys. Ed. & Health ..	4		Food & Nutrition 10 .....	4
Chemistry 2, 3, 4 <sup>2</sup> ..	9 to 12		Human Dev. & Fam. Rel. 40, 41 <sup>1</sup> , 85 <sup>1</sup> ..	2 to 4
Physics 10 .....	0 to 3		Nursing 7 (HD & FR 80) .....	2
Psychology 11 .....	5		Art 10 or Music <sup>1</sup> .....	2
Sophomore Year		Credits	Clothing & Textiles	
Religion .....	6		15, 25 <sup>1</sup> , 60, 125 ..	3 to 9
Bacteriology 21 .....	4		Econ. & Mgt. of the the Home 125 ..	3
Zoology 48 .....	5		Food & Nutrition 40 <sup>2</sup> 105, 106 <sup>1</sup> , 120 ..	4 to 8
Economics 1 .....	5		Housing & Design 20 <sup>1</sup> , 145 .....	2 to 5
Physics 10 .....	3		Human Dev. & Fam. Rel. 40, 50 <sup>1</sup> , 85 <sup>1</sup> ..	2 to 5
Electives: Sociology <sup>1</sup> Speech <sup>1</sup> or Educ. ..	3 to 8		Art <sup>1</sup> , Music <sup>1</sup> , Horticulture 3 <sup>1</sup> or 12 <sup>1</sup> ..	2 to 6
Junior Year		Credits	Clothing & Textiles	
Religion .....	6		135, 175 .....	3 to 6
History 70 .....	5		Econ. & Mgt. of the Home 130 .....	3
Electives: Speech <sup>1</sup> Journalism <sup>1</sup> Radio <sup>1</sup> Television <sup>1</sup> or Education <sup>3</sup> , including Instruction 138 ..	10 to 15		Food & Nutrition 120, 140 .....	4 to 8
			Homemaking Educ. 122, 123 .....	5
			Housing & Design 145, 160, 175 ....	2 to 8
			Human Dev. & Fam. Rel. 50 <sup>1</sup> , 115, 150 ..	3 to 9



Senior Year	Credits	Food & Nutrition	
Religion .....	6	145 <sup>1</sup> , 150, 170 .....	2 to 4
History 70 .....	5	Homemaking Educ.	
English Literature ..	6	123, 139 <sup>3</sup> , 140 <sup>3</sup> ....	4
Electives or Educ. ..	12 to 14	Housing & Design	
Clothing & Textiles		160, 175 .....	3
145 <sup>1</sup> , 175 .....	2 to 6	Human Dev. & Fam.	
Econ. & Mgt. of the		Rel. 120 <sup>1</sup> , 187 <sup>1</sup> , 188 <sup>1</sup>	4 to 7
Home 170 .....	4		

1 Optional for students planning to teach; at least 70 credit hours of work in the College is advised for prospective teachers.

2 Not for majors in Food and Nutrition or students planning to teach homemaking.

3 Prospective teachers should elect these courses during the same quarter during their senior year and should also plan to block with them one or two of the following: Clothing and Textiles 175, Homemaking Education 123, and Housing and Design 160.

## Clothing and Textiles

Assistant Professor: M. S. Potter\*.

Instructors: Jorgensen (acting chairman, 312 E), Domgaard, E. L. Gardner.

The Department of Clothing and Textiles aims to help the student understand clothing as it relates to personal needs and to the needs of family members. Considerations are given to the satisfaction of desires to express creative abilities; the understanding of fabrics, their selection, use and care; economy; and the comfort and health of the body. The curriculum offers experience in clothing selection, buying, design, and construction; the identification and quality of textiles; and an appreciation for the history of costume and textiles.

Opportunities in the field of clothing and textiles without advanced study include work with fabric or pattern companies, consumer education, dressmaking, and teaching. Advanced study is usually necessary for positions in fashion merchandising, display, promotion and personnel work in retail stores, designing, textile testing, or design and research.

For all majors in Clothing and Textiles a total of at least 30 credit hours in the department is required, including a minimum of 5 hours in each of the 4 areas listed below.

For all minors in Clothing and Textiles, a total of least 20 credit hours in the department is required including a minimum of one course in at least 3 of the 4 areas listed below.

Construction			Textiles		
New Number	Old Number	Credits	New Number	Old Number	Credits
15	1	3	60	55	3
25	2	3	160	160	2
105		2	180	195	2
125	102	3	194	190	
135	125	3			
145	120	4			
195	190				

Design and Selection			Economics and History		
New Number	Old Number	Credits	New Number	Old Number	Credits
10	30	2	130	140	3
20		2	140		3
150	141	3	170	162	2
155	142	3			

Those interested in textile design may complete a major in Clothing and Textiles with a minor in art. The following courses are recommended: Art 11, 12, 21, 23, 104, 114, 150, 152, 162, 166.

Those interested in fashion merchandising may complete a major in Clothing and Textiles with a minor in marketing. The following courses are required: Marketing 107 (5), 108 (5), 159 (5), plus 5 hours selected from among Marketing 151 (3), 158 (5), 170 (1), and 171 (1).

Those interested in costume design may complete a major in clothing with a minor in art. The following courses are recommended: Art 11, 12, 22, either 23 or 104, 114, 122, 143, 152, 162, 166.

Majors in Clothing and Textiles desiring to teach in secondary schools should complete a double major in Homemaking Education and Clothing and Textiles. (See requirements for Homemaking Education.) The plan requires at least two additional quarters in summer session.

Additional related courses in other departments:

Art: 50, Print Making; 59, Ceramics; 63, Crafts; 104, Art History and Appreciation; 164, Plastics; 166, Metal Work and Jewelry.

Housing and Design: 30, Weaving; 160, Home Furnishings.

Industrial Arts: 28/128, Upholstery; 63, Crafts.

Many of the following courses are planned to be of value to both men and women.

#### Lower Division Courses

5. **Elementary Clothing Construction.** (2) A.W.S. Two two-hour laboratory periods. Service course for students with little

or no experience in sewing. No credit toward a major or minor in Clothing and Textiles. Staff

Pattern selection and construction of garments such as blouses, skirts, jumpers, cotton dresses, housecoats, and pajamas.

**10. Dress Selection.** (2) A.W.S. Two two-hour periods. Jorgensen

The elements and principles of design as applied to the selection of clothing and accessories. The planning and care of the wardrobe including cost. Factors that contribute to good grooming. (Formerly Clothing and Textiles 30.)

**15. Dress Construction.** (3) A.W.S. Three two-hour laboratory periods. Staff

Factors that influence the choice of pattern and material for dresses—including cost. The construction of a tailored dress. (Formerly Clothing and Textiles 1.)

**20. Clothing Selection and Care.** (1) W. Two lectures and one two-hour laboratory period for one-half of the quarter. To be elected with Food and Nutrition 20. Designed for men students; especially helpful for prospective missionaries.

Selection, purchase, and care of men's apparel as related to the individual. Pressing, spot removal, mending, darning, sewing on buttons. Construction of sport shirt optional.

**25. Design and Construction, Elementary.** (3) A.W.S. Three two-hour laboratory periods. Prerequisite: Clothing and Textiles 15. Students with adequate background shall elect Clothing and Textiles 125. Staff

Introduction to pattern analysis, design, and drafting. New techniques, design problems, and dressmaking skills applied to the construction of an afternoon or formal dress. (Formerly Clothing and Textiles 2.)

**60. Textiles.** (3) A.W.S. Domgaard

An appreciation of design, color, and texture in fabrics. Natural and synthetic fibers; their yarns, weaves, dyes and finishes. (Formerly Clothing and Textiles 55.)

### Upper Division Courses

**105. Millinery.** (2) W. Two two-hour class periods. Prerequisites: Art 10 or Clothing and Textiles 10 and 15. (Not given this year.) Gardner

The history of head covering as a part of apparel. Design and construction of straw, felt, and fabric hats with emphasis on appropriateness for the individual.

**125. Design and Construction, Intermediate.** (3) A.W.S. Three two-hour laboratory periods. Prerequisite: Clothing and Textiles 15. Not to be elected by students who have completed Clothing and Textiles 25. Staff

Introduction to pattern analysis; the modification of commercial patterns. New techniques, design problems, and dressmaking skills applied to the construction of afternoon and formal dresses. (Formerly Clothing and Textiles 102.)

- 130. History of Costume.** (3) A. Jorgensen  
The social, economic, and political influence on dress and fabrics. The study of costume as an expression of the life of the people and as a basis for interpreting modern fashions. (Formerly Clothing and Textiles 130.)
- 135. Family Clothing.** (3) A.S. Three two-hour laboratory periods. Prerequisites: Clothing and Textiles 25 or 125 and 60. Jorgensen  
Problems involving the selection, care, and construction of clothing for the family; cost discussed. Construction and remodeling. (Formerly Clothing and Textiles 125.)
- 140. Historic Textiles.** (3) (Not given this year.) Prerequisite: Clothing and Textiles 60. Gardner, Potter  
The history and development of textile fabrics, including weaves and patterns; hand-made lace, tapestry, and oriental rugs. Field trips.
- 145. Tailoring.** (4) A.W.S. Five two-hour laboratory periods, and two hours to be arranged. Prerequisites: Clothing and Textiles 25 or 125 and 60; Clothing and Textiles 10 recommended. Gardner  
Custom tailoring techniques applied to the construction of coats and suits. (Formerly Clothing and Textiles 120.)
- 150. Costume Design.** (3) W. Daily. Prerequisites: Art 10 or Clothing and Textiles 10 and Clothing and Textiles 15; Clothing and Textiles 25 or 125 and 130 recommended. Jorgensen  
By use of various media for inspiration, opportunity for creative experience is given in applying the principles of line, texture, and color to the design of dress. One original design is fashioned into a garment. (Formerly Clothing and Textiles 141.)
- 155. Draping and Flat Pattern Design.** (3) S. Three two-hour laboratory periods. Prerequisites: Clothing and Textiles 25 or 125 and 60; Clothing and Textiles 130 and 150 recommended. Gardner  
Creative design, and fitting by draping on an individualized dress form. (Formerly Clothing and Textiles 142.)
- 160. Advanced Textiles.** (2) (Not given this year.) Two two-hour class periods. (One lecture, three laboratory hours.) Prerequisites: Clothing and Textiles 60, Chemistry 2 and 3. Potter  
Quantitative analysis and micro-analysis of fabrics. Testing of textiles in view of their use and care. Recent developments in fibers and finishes.
- 170. Textile Economics.** (2) W. Prerequisites: Economics 1 and Clothing and Textiles 60. Jorgensen  
The economic, social, and psychological aspects of clothing. The development of the garment industry. The economics of selection of household textiles and family clothing. (Formerly Clothing and Textiles 162.)

- 175. Construction Techniques.** (2) S. Two two-hour periods. Prerequisite: Clothing and Textiles 25 or 125. Staff  
Comprehensive course in sewing techniques. Preparation of illustrative material for aid in teaching.
- 180. Readings.** (2) S. Restricted to students who have completed at least 17 hours of Clothing and Textiles. Staff  
Reports and discussions on current literature in Clothing and Textiles. (Formerly Clothing and Textiles 195.)
- 194. Special Problems in Textiles.** (TBA) A.W.S. Prerequisite: permission of the instructor and the chairman of the department. Restricted to students who have completed Clothing and Textiles 180 or its equivalent. Staff  
Independent study of a special problem in textiles under the direction of an instructor. (Formerly Clothing and Textiles 190.)
- 195. Special Problems in Clothing Construction.** (TBA) A.W.S. Prerequisite: permission of the instructor and the chairman of the department. Restricted to students who have completed Clothing and Textiles 180 or its equivalent. Staff  
Independent study of a special problem in clothing under the direction of an instructor.

## Economics and Management of the Home

Professors: Pfund (chairman, 211 E), I. Barlow.

Instructor: Hinman.

The courses in the Department of Economics and Management of the Home provide an opportunity to study the management of family resources in terms of the goals of all members of the family. The student is helped to understand that choices in regard to the uses of material goods, time, energy, money, abilities, and skills are made primarily on the basis of family relationships and the optimum development of the individual.

A minor is offered in the department. A major may be elected in conjunction with the department of Housing and Design.

Related Courses in other departments:

Economics 1; Marketing 151; Agricultural Economics 23; Finance and Banking 155; Clothing and Textiles 170; Food and Nutrition 40, 140; Housing and Design, all courses.

Most of the following courses are planned to be of value to both men and women.

### Lower Division Courses

- 30. Management for Effective Living.** (3) A.W. Barlow  
The goals and values of homemaking as related to group living and to such activities as meal planning, shopping, budgeting, cleaning, recreation, and the use of leisure. (Formerly Family Life 59.)

- 50. Simplification in Household Tasks.** (2) (Not given this year.)  
Effective planning of home work centers. Ways in which the homemaker may lighten her work within the home.
- 65. Consumers in the Market.** (3) W.S. Barlow  
Aids toward the intelligent buying of commodities. The effect on the consumer of present market practices. Consumer protection, including the labeling of merchandise. Comparison of quality in various household items. (Formerly Family Life 163.)

### Upper Division Courses

- 125. Family Finance.** (3) A.S. Prerequisite: Economics 1. Barlow  
Economic problems of most direct concern to the family of today. The sources and adequacy of family income, its apportionment and expenditure in terms of family needs. (Formerly Family Life 161.)
- 130. Home Management.** (3) W.S. Prerequisites: Human Development and Family Relationships 115, and Food and Nutrition 40 or 140. Hinman  
The place of management in achieving personal and family goals from the time of marriage to retirement. Opportunities for children to share and take responsibility. Management related to specific resources, as time, energy, money, material goods, skills, abilities and interests. (Formerly Family Life 166.)
- 170. Homemaking Apartment.** (4) A.W.S. Prerequisites: Economics and Management of the Home 130 and Food and Nutrition 40 or 140. Arrangements are to be made in advance for living in the apartment. Hinman  
Students live in the homemaking apartment one-half of the quarter, (block), for experience in group living and management at various cost levels. No rent is paid. Food and incidentals average \$35.00 to \$40.00 for the five-week period, payable at the beginning of residence. (Formerly Family Life 167.)
- 180. Readings in Economics and Management of the Home.** (2) (Not given this year.) Prerequisites: 16 hours of Economics and Economics and Management of the Home. Staff
- 190. Problems in Management of the Home.** (TBA) (Not given this year.) Prerequisites: 18 hours of Economics, and Economics and Management of the Home. By permission of the instructor and the dean. Staff  
Independent study of a special problem in Management of the Home under direction of an instructor.
- 195. Problems in Economics of the Home.** (TBA) (Not given this year.) Prerequisite: 18 hours of Economics, and Economics and Management of the Home. By permission of the instructor and the dean. Staff  
Independent study of a special problem in Economics of the Home under direction of an instructor.

## Food and Nutrition

Professors: I. Barlow, Pfund.

Assistant Professor: Bennion (chairman — E).

Instructors: M. S. Jacobs, Jewell, McIntosh.

The Department of Food and Nutrition aims to help the student understand the basic principles which underlie (1) the role played by food in the maintenance of optimum health and (2) the preparation of food of high culinary and nutritive quality. Application of these principles is made through the planning, preparation, serving, and evaluation of attractive and nourishing family meals and through the preparation and evaluation of single items under experimentally controlled conditions. The economics of buying and the wise management of time and energy are emphasized.

Some skill in food preparation is acquired, but the student can attain the desired amount of skill only by repeated practice outside of the laboratory. Students are urged to gain experience at home in the planning, preparation, and serving of meals for the family. Limited opportunity for preparation of family meals under home conditions is provided. Some homemakers in the community cooperate with the students in one of the courses in meal planning to have one or two meals prepared in the home; the instructor serves as counselor.

Courses in this department provide background for training in such professional fields as hospital dietetics, public health nutrition, school lunch administration, test kitchen work, food demonstration, and research.

For all majors in Food and Nutrition a total of at least 30 credit-hours in the department is required, including a minimum of 4 hours in group a, and 5 hours in each of groups b and c. Students with a vocational interest in hospital dietetics, in commercial food work, or in research will need more work in science and in food and nutrition than the minimum listed for a major.

For all minors in Food and Nutrition a total of at least 20 credit-hours in the department is required, with a minimum of 4 hours in 3 of the 4 groupings listed below.

### a. Food and Nutrition

New Number	Old Number	Credits
10	10	4
40	11	4
140	111	4

### b. Food Preparation

New Number	Old Number	Credits
110		3
120	112	4
122		4
150	109	2
160-161		2 or 3
162-163		2 or 3
180		2
194		TBA

c. Nutrition			d. Institution Management		
New Number	Old Number	Credits	New Number	Old Number	Credits
105	153	3	170	150	5
106		1	172	151	4
115	154	3			
145	152	2			
155	155	3			
175	156	2			
195		TBA			

For positions in hospital dietetics a postgraduate internship is usually required. Certain centers have been approved by the American Dietetic Association to give internships and training. Some provide training in food service administration in institutions other than hospitals including residence halls and industrial and school cafeterias, some in food clinic work, and some in hospital dietetics. A list of these centers as printed by the American Dietetic Association is available in the office of the department chairman. These courses are ordinarily ten to twelve months in length.

The American Dietetic Association has outlined the following program as prerequisite to admission to approved postgraduate internship training :

Subjects	Minimum Hours
Chemistry .....	18
To include: General Inorganic (Chemistry 2); Organic (Chemistry 3); *Biochemistry with laboratory (Chemistry 110).	
Biology .....	9
To include: Human Physiology (Zoology 48); Bacteriology 21.	
Social Sciences .....	14
To include two of the following: Psychology 11, Sociology 11, Economics 1.	
Education .....	5
To include: Educational Psychology 100 or Methods of Teaching.	
Foods .....	9
To include: Food Selection and Preparation (FN 10 and 120), Meal Planning and Service (FN 140).	
Nutrition and Dietetics .....	9
To include at least two of the following: Normal Nutrition (general) (FN 105 and 106), Advanced Nutrition (FN 115), Diet in Disease (FN 155) (for students entering hospital and food clinic courses.)	



Institution Economics .....	9
To include: Quantity Cookery (FN 170), Organization and Management (FN 172)	

**Recommended Electives:**

Accounting 1; Housing and Design 145; Food and Nutrition 110, 160, 161, 162, 163, 175.

\*Food Chemistry may be substituted by those studying for administrative internships.

The courses in this department are planned to be of value to both men and women.

### Lower Division Courses

5. **Essentials of Nutrition.** (3) A.W.S. Primarily for students registered in colleges other than Family Living. Not to be elected by students who plan to elect Food and Nutrition 10.  
I. Barlow, Bennion, McIntosh  
The basic concepts of human nutrition and their application in the achievement and maintenance of optimum health.
10. **Introductory Food and Nutrition.** (4) A.W.S. Three lectures and two two-hour laboratory periods. Open to all students.  
Staff  
Laboratory experience in the preparation and use of common foods for family meals; their value in the maintenance of optimum health. Consideration of nutritive value in relation to the cost of food.
20. **Food and Nutrition.** (1) W. Two lectures and one two-hour laboratory period for one-half of the quarter. To be elected with Clothing and Textiles 20. Designed for men students; especially helpful to prospective missionaries.  
Staff  
Laboratory experience in the preparation of quick and easy nutritious meals. Food needed for the maintenance of optimum health. Ways of supplementing unavoidable "hit and miss" eating to bring the intake to an adequate nutritional level. Preparation of an eating guide and recipes for "batching."
40. **Menu Planning and Meal Service.** (4) A.W.S. Three lectures and two two-hour laboratory periods. Prerequisite: Food and Nutrition 10. Majors in Food and Nutrition and students planning to teach homemaking should register for Food and Nutrition 140.  
Jacobs, Jewell, McIntosh  
Problems involved in the selection of food for nutritionally adequate family meals with emphasis on those of low cost. The economics of buying and the organization and management of time and energy in the planning and preparation of meals. Experience in using various types of service. (Formerly Food and Nutrition 11.)

50. **Food Preservation.** (2) A. One two-hour and one three-hour period. (Open to all students after 1955-56.) Staff

Basic theory, and practice in the canning and freezing of fruits, vegetables, and meats. Comparison of products with fresh products.

### Upper Division Courses

105. **Fundamentals of Nutrition.** (3) S. Prerequisites: Food and Nutrition 10, Zoology 48, and Chemistry 3. Bennion

The basic concepts of human nutrition and energy metabolism in growth. The achievement and maintenance of optimum health for all family members. Budgeting of the food dollar in families of different income levels. (Formerly Food and Nutrition 153.)

106. **Fundamentals of Nutrition, Laboratory.** (1) S. One two-hour period. Designed to accompany Food and Nutrition 105. Bennion

Experience involving a study of food portions, their cost, and their value in supplying body needs.

110. **Food Preparation.** (3) W.S. Prerequisite: Food and Nutrition 10. Staff

Different ways of preparing and using a wide variety of foods. The preparation of some foreign dishes.

115. **Advanced Nutrition.** (3) W. Prerequisites: Food and Nutrition 105 and Chemistry 4 or 110. Two lectures and three one-hour laboratory periods for animal feeding experiments. Bennion

A detailed study of body metabolism in relation to food intake, with emphasis on the role of nutrients in over-all energy metabolism and growth.

120. **Introduction to Experimental Cookery.** (4) A.S. Three lectures and two two-hour laboratory periods. Prerequisites: Food and Nutrition 10 and Chemistry 3; Chemistry 4 or 110 recommended. Bennion, McIntosh

How and whys of food preparation. An understanding of the purpose of ingredients and the procedure used in the preparation of some common foods. Comparison of products prepared when the kind or proportion of ingredients or the method of manipulation is varied. (Formerly Food and Nutrition 112.)

122. **Experimental Cookery.** (4) (Not given this year.) Prerequisites: Food and Nutrition 120 and Chemistry 4 or 110.

A continuation of Food and Nutrition 120. More emphasis upon the experimental techniques used in measuring the quality of food.

140. **Menu Planning and Meal Service.** (4) W.S. Three lectures and two two-hour laboratory periods. Prerequisites: Economics 1, Food and Nutrition 105 and 110 or 120. Economics and Management of the Home 125 is recommended. Staff

The application of the fundamentals of nutrition to the

selection of food for family meals of varying cost. The economics of food purchasing. Organization and management of time and energy in the planning and preparation of meals. Experience in the use of various types of service. (Formerly Food and Nutrition 111.)

- 145. Nutrition of Mother and Child.** (2) S. Prerequisite: Food and Nutrition 5 or 105. Bennion

Application of the principles of nutrition to the feeding of expectant mothers, infants, and children. (Formerly Food and Nutrition 152.)

- 150. Food Preservation.** (2) A. Prerequisites: Chemistry 2, Bacteriology 21, and Food and Nutrition 110 or 120. Staff

Underlying theory of and practice in the canning and freezing of fruits, vegetables, and meats; in the freezing of cooked products; jelly-making; and pickling. Comparison of products with fresh produce. (Formerly Food and Nutrition 109.)

- 155. Nutrition in Disease.** (3) S. Two lectures, one two-hour laboratory period for the preparation of diets. Prerequisite: Food and Nutrition 105. Bennion

Metabolic changes in abnormal conditions. The use of therapeutic diets as an aid in the control of such conditions. (Formerly Food and Nutrition 155.)

- 160. Chemistry Applied to Food.** (2) W. Prerequisite: Chemistry 2. Students in the College of Family Living must also have completed Food and Nutrition 120. Pfund

An understanding of quality in prepared food such as biscuits, muffins, other quick breads, candies, some frozen desserts, vegetables, and canned products. Practices followed in preparation are related to the physiochemical properties of gases, liquids, solids, and solutions; pH, hydrogen-ion concentration, and titratable acidity; and to the chemical reactions involved. (Formerly Food and Nutrition 113.)

- 161. Chemistry Applied to Food, Laboratory.** (1) (Not given this year.) One two-hour period. Designed to accompany Food and Nutrition 160. Staff

- 162. Chemistry Applied to Food.** (2) S. Prerequisite: Chemistry 4 or 110. Students in the College of Family Living must also have completed Food and Nutrition 120. Pfund

An understanding of quality in prepared food such as meat, fish, eggs and egg products, cheese dishes, gelatin dishes, bread, cake, and pastry. The composition of the food and the practices followed in its preparation are related to its colloidal nature and to the chemical and biochemical reactions involved. (Formerly Foods and Nutrition 114.)

- 163. Chemistry Applied to Food, Laboratory.** (1) (Not given this year.) One two-hour period. Designed to accompany Food and Nutrition 162. Staff

- 170. Quantity Food Preparation.** (5) W. Two one-hour lectures and six hours of laboratory, TBA. Prerequisites: Food and Nutrition 120 and 140. McIntosh  
Practical experience in menu planning, and food preparation for large groups. Use, operation, and maintenance of equipment. (Formerly Food and Nutrition 150.)
- 172. Food Management in Institutions.** (4) S. Two two-hour lectures and three hours TBA. Prerequisite: Food and Nutrition 170. McIntosh  
Administrative problems of food-service operation; management of financial and personnel problems, planning of institution kitchen, and selection of equipment. Field trips, observations, and practical experience to be arranged. (Formerly Food and Nutrition 151.)
- 175. Readings in Nutrition.** (2) (Not given this year.) Prerequisites: Food and Nutrition 115 and 145 or 155. Staff
- 180. Readings in Food.** (2) (Not given this year.) Prerequisites: Food and Nutrition 160 and 162. Staff
- 194. Special Problems in Food.** (TBA) Prerequisite: permission of the instructor and the chairman of the department. For students who have completed at least 15 hours in Food and Nutrition including Food and Nutrition 180.  
Independent study of a special problem in food under the direction of an instructor.
- 195. Special Problems in Nutrition.** (TBA) Prerequisite: permission of the instructor and the chairman of the department. For students who have completed at least 15 hours in Food and Nutrition. Independent study of a special problem in Nutrition under direction of an instructor.

## Homemaking Education

Professor: Pfund (chairman, 211 E.)

Instructors: M. S. Jacobs, McIntosh, Poulson.

The Department of Homemaking Education cooperates with the Department of Instruction in the College of Education to the end that students may be prepared for the teaching of Homemaking in secondary schools. For certification, a prospective teacher of Homemaking is required by the State of Utah Department of Public Instruction to complete the following: (1) a minimum of 60 credit hours in Homemaking (the College advises a minimum of 70 hours); (2) a minimum of 10 credit hours each in Social Science, Physical Science, Biological Science, and the Humanities; and (3) a minimum of 33 credit hours of Education, which shall include all of the courses offered in the Department of Homemaking Education as well as selected courses in the College of Education.

Prospective teachers of Homemaking should know that the comprehensive objective of their teaching is to help pupils meet their own needs and those of their prospective families. The aims

may be summarized briefly: to help the pupil achieve a wholesome personality and satisfying relationships with others; to help the pupil acquire abilities and understandings that will assist her to become a successful homemaker; to give some guidance toward wage earning and toward the satisfying use of leisure time. Thus any college student who prepares for teaching in this field is laying a firm foundation for her own success as a homemaker.

An appropriate four-year college program for the prospective teacher is given on page 386. The program is designed so that its successful completion will lead to certification for teaching in all areas of homemaking in the high schools of Utah. A student interested in extension service or home demonstration work shall follow a similar program but carry fewer courses in education. A student becomes eligible to elect the courses in student teaching only after she has been admitted formally to the program by the Colleges of Family Living and Education.

- 122. Methods of Teaching Homemaking.** (3) A.S. Prerequisite: or parallel: Instruction 120. Poulson

The importance of management in the teaching program. An understanding of the place of homemaking in the total educational program. Planning in terms of the homemaking curriculum. Preparation of a resource file for use in teaching. Home project required. (Formerly Family Life 172 and Secondary Education 154. See also Instruction 123.)

- 123. Demonstration Experiences.** (2) A.W.S. Prerequisites: Work in each area enumerated in the following description, and permission of the instructor. Jacobs, McIntosh, Poulson

Experience is given in the planning and execution of demonstrations in the areas of clothing, food, housing, management, child care, and family relationships, with emphasis on the management aspect in each area. Methods of demonstration adapted to the teaching of homemaking in secondary schools are stressed.

- 138. Secondary Student Teaching.** (5) A.W.S. Includes observation of teaching. (Formerly Secondary Education 184a. See Instruction 138.)

- 139. Student Teaching of Homemaking.** (8) A.W.S. Prerequisite: Instruction 120 and Homemaking Education 138. To be taken in the same half of the quarter (blocked) with Economics and Management of the Home 170. Poulson

The student teacher lives in the community in which she teaches for one-half of the quarter. She bears her own expenses. (During the other half, she lives in the Homemaking Apartment.) Close contact is made with faculty, students, and community. Participation on committees and in extra-curricular activities, and responsible planning and teaching are expected. Fee, \$10.00, to cover transportation charges to and from the community. (Formerly Secondary Education 184b. See also Instruction 139.)

- 140. Problems in Teaching Homemaking.** (2) A.W.S. Block with Homemaking Education 139. Poulson

Developed around needs of students to assist them in the management of their student teaching. Consideration of literature in the field of Homemaking Education. (Formerly Family Life 173 and Secondary Education 155. See also Instruction 124.)

## Housing and Design

Professor: Pfund (chairman, 211 E).

Instructors: E. L. Gardner, Hinman.

The Department of Housing and Design aims to help the student appreciate, understand, and plan for attractiveness and usefulness in home environment through study, observation, and creative experience. The primary goal is to increase ability to make the home and its surroundings worthy of their high purpose; to provide a place for the promotion of the spiritual, aesthetic, intellectual, and physical growth of the family, as well as to provide shelter. The principles of good design and the wisdom of planning within the budget are emphasized.

A minor, with selected courses from related departments, is offered. A major may be elected in conjunction with the department of Economics and Management of the Home.

Related Courses in Other Departments:

Art: 63, Crafts; 113, Home Planning; 114 to 117, Interior Design; 59, 159, 160, Ceramics.

Horticulture: 3, Beautifying the Home Grounds; 12, Flower Arrangement.

Industrial Arts: 27, 127, Wood and Metal Finishing; 28, 128, Upholstery; 60, Recreational Handicrafts.

The following courses are planned to be of value to both men and women.

## Lower Division Courses

- 20. Weaving.** (2) W. Two two-hour class periods; one hour lecture, three hours laboratory. Prerequisites: Clothing and Textiles 60 and Art 10. Staff

Creative design as applied to woven fabrics; experience in weaving methods. A survey of hand-woven fabrics in world cultures.

- 45. Household Equipment.** (3) A.W. Introductory Physics recommended. Hinman

Selection, placement, use, care, and repair of household equipment. Advantages of various types of equipment. Trips to retail stores and to homes to study arrangements. (Formerly Family Life 60.)

## Upper Division Courses

**145. Household Equipment.** (3) A.W. Prerequisite: Physics 10.

Hinman

Selection, placement, use, care and repair of household equipment. Advantages of various types of equipment. Trips to retail stores and to homes to study arrangements. Consideration of installment buying. (Formerly Family Life 60.)

**160. Home Furnishings.** (2) A.W.S. Prerequisite: Clothing and Textiles 15. Art 10, 114, and Clothing and Textiles 60 recommended.

Gardner

Art related to the home through home furnishings; their care and construction; economics and art applied to their selection. Laboratory work includes the making of draperies, slip covers, lamp shades; quilting; and weaving. (Formerly Clothing and Textiles 180.)

**175. Housing.** (3) A.S. Housing and Design 160 recommended.

Hinman

The housing requirements of families as influenced by their interests, activities, and socio-economic status. The planning of room arrangement and space. Field trip. (Formerly Family Life 164.)

**Human Development and Family Relationships**

Professors: Pfund (chairman, 211 E), Ballif\*, I. Barlow, Bradford, Holbrook, Symons.

Associate Professors: Allen, Jenny.

Instructors: F. Barlow, Heaton, V. W. Larsen, E. Richards, A. A. Wilson.

The department of Human Development and Family Relationships provides opportunities for increased understanding and appreciation of abundant and harmonious living within the family group and extends to the relation of the family with the community. The cultivation of insights and skills basic to effective human relationships, especially within the family, constitutes a major objective. Courses of study draw heavily upon the related areas of psychology, sociology, religion, recreation, and the humanities.

Through laboratories of the University and the facilities of the community, opportunities are provided for the study of human development and family relationships from infancy through old age. In the nursery school laboratory, parents are often in attendance. Some families cooperate by permitting students to visit in their homes. Experience is provided through contact with community centers and family-serving agencies.

A major course of study in the department of Human Development and Family Relationships provides basic preparation for nursery school education or counseling; advanced study is desirable and is usually necessary. Other allied work-opportun-

ities lie within the fields of child welfare, recreation, occupational therapy, psycho-therapy, scouting and other youth-group leadership programs.

By 1956, the College hopes to carry an affiliation with the Merrill-Palmer School in Detroit. When this is arranged, students interested in various phases of child development; parent education; social service work; nutrition; or extension or homemaking teaching may apply and be selected to study there during one term of the senior year or the last part of the junior year. Selection will be on the basis of scholarship, sincerity of interest, and readiness for intensive work. A limited number of graduate assistantships are available each year for work at Merrill-Palmer School. Students interested in these should consult the Merrill-Palmer catalog.

To obtain a major in this department, a student shall complete a total of at least 30 credit-hours of work in the department. The total shall include the following courses:

Human Development and Family Relationships 40, 41, 50, 51, 80, 85, 115, 120, 150, and 192, together with other upper division courses in the department to be agreed upon by the student and the advisor.

Related Courses in Other Departments:

Clothing and Textiles 125; Food and Nutrition 145; Education 168; Industrial Arts 60; Music 2; Psychology 130, 139, 140, 143, 145; Sociology 11, 112, 114, 124.

The following courses are planned to be of value to both men and women.

### Lower Division Courses

15. **The Latter-day Saint Family.** (2) A.W.S. Staff  
The significance of the family in the gospel plan of salvation and exaltation. L.D.S. scriptural ideals of marriage and parenthood. The family in genealogical research and temple work. Spiritually healthy family living as the key to abundant joy.
40. **Child Development.** (3) A.W.S. (†GER-SS) Prerequisite: Psychology 11. Sociology 11 recommended. Taylor, Staff  
Consideration of the biological and psychological growth and development of the child and of his relationship with his family, peers, and teachers; his readiness and capacity to learn; and his understanding of himself. Study begins with infancy and continues through adolescence. (Formerly Family Life 81.)
41. **Nursery School Observation.** (1) A.W.S. Ten hours of observation TBA. F. Barlow, Staff  
Designed to accompany Human Development and Family Relationships 40. Reports required. Limited opportunity for participation. Open to all students in selected courses in Education, Nursing, Psychology, and Sociology.



50. **Principles of Child Guidance.** (3) A.W. (GER-SS) Prerequisite: Human Development and Family Relationships 40.

Allen, Staff

The application of fundamental principles of psychology in guiding the behavior of young children.

51. **Nursery School Observation and Participation.** (1) A.W. Ten hours of observation TBA. F. Barlow, Staff

Designed to accompany Human Development and Family Relationships 50. Analytical reports of observations required. Some participation required. Open to students in selected courses in Education, Nursing, Psychology, and Sociology.

70. **Creative Play in Childhood.** (3) (Not given this year.) Prerequisite: Human Development and Family Relationships 40. Staff

The use of creative play materials in enriching a child's life. The meaning of play and its value in meeting the needs of the growing child.

80. **Family Health and Home Nursing.** (2) A.W.S. Jenny, Richards, Wilson

Knowledge and attitudes about healthful family living. Skills in giving simple home nursing care to the sick or injured. Essentials of maternal health and child care. (Formerly Family Life 80. See Nursing 7.)

85. **Foundations for Marriage.** (2) A.W.S. Staff

Understanding oneself in relation to the desire for a marriage partner and a family. Boy-girl associations prior to marriage. Religious, social, and economic considerations preparatory to the establishment of a family. Early marital adjustment. (See Sociology 13.)

### Upper Division Courses

100. **History and Philosophy of Early Childhood Education.** (3) S. Staff

History of the Child Development movement, present-day agencies and programs operating to further the welfare of children; nursery school administration.

105. **Achieving Success in Marriage.** (3) A.W.S. (†GER-SS) Prerequisite: Psychology 11. Open to students other than majors in Human Development and Family Relationships and students preparing to teach homemaking. These students should elect Human Development and Family Relationships 115 and courses in Economics and Management of the Home.

Ballif\*, Bradford, Canning, Staff

Consideration of factors that contribute to successful marriage. Maturity, compatibility and cooperation as basic concepts in marital adjustment. Maximization of family development through healthy parent-child relationships and the effective management of family resources. Unique tasks faced by the family in maintaining stability in a dynamic twentieth century world. (See Sociology 170.)

- 115. Family Relationships.** (3) A.W.S. (†GER-SS) Prerequisite: Psychology 11. Not open to students who have taken Human Development and Family Relationships 105. I. Barlow  
The family in action in the American culture of today. Interpersonal relationships in the family; their significance in developing values, goals, attitudes and patterns of behavior that make for wholesome family living. (Formerly Family Life 165.)
- 120. Growth and Development During the Middle and Later Years.** (3) A.S. (†GER-SS) Prerequisites: Human Development and Family Relationships 40 and one other course in Human Development and Family Relationships. (May not be given in 1955-56.) Taylor, Staff  
Adjustments in the middle and later years revolving around physical, emotional, and social changes. Emphasis will be placed upon needs that arise from changes in family relationships, living arrangements, and employment. Discussions of public and private provisions designed to meet the needs of older people.
- 150. Experience with Children.** (3) A.W.S. Prerequisite: Human Development and Family Relationships 40 or its equivalent. Human Development and Family Relationships 50 recommended. Two lectures, and one three-hour laboratory period or two two-hour periods. F. Barlow, Staff  
An opportunity to apply principles of child guidance while working with children in the Nursery School laboratory. (Formerly Family Life 168.)
- 152. Nursery School Methods.** (3) A.W.S. Parallel or prerequisite: Human Development and Family Relationships 150. Staff  
Special consideration given to understanding the needs of individual children in the Nursery School and evaluation of procedures used in guiding them. Study and collection of materials used in nursery school teaching.
- 165. Parent Education.** (3) (Not given this year.) Prerequisite: Human Development and Family Relationships 50. Staff  
Training for parent education. Basic principles in the organization of parent study programs and formulation and presentation of programs for parents.
- 175. Introduction to Marriage and Family Counseling.** (3) W. Bradford, Staff  
Theories and techniques used in marriage and family counseling. Consideration of individual and group counseling as it pertains to the family.
- 187. Planning for Social Recreation.** (2) A.W.S. Holbrook  
Principles and techniques in arranging for and conducting social recreation for family and church groups. (See Recreation 187 and Church Administration 187.)
- 188. Leadership in Church Dances.** (2) A.W.S. Heaton  
To meet the needs of community, church, and school recreation leaders. Designed particularly to give experience and training in the church dance program. (See Recreation 188 and Church Administration 188.)

- 190. Readings in Human Development and Family Relationships.**  
(2) S. Staff  
Discussions and reports of current readings in this field. Open to students who have completed 15 hours of Human Development and Family Relationships.
- 192. Seminar.** (3) W. Prerequisite: Human Development and Family Relationships 190 or its equivalent. Staff  
Analysis and evaluation of selected research reports in human development and family relationships. Special emphasis upon problems involved in designing and executing research.
- 195. Special Problems in Human Development and Family Relationships.** (TBA) A.W.S. Staff  
For qualified students majoring in Human Development and Family Relationships upon consultation with the instructor and the chairman of the department.

## Family Relationships

(See courses in Family Living.)

## Field Crop Production

(See courses in Agronomy.)

## Food and Nutrition

(See courses in Family Living.)

## Finance and Banking

Professors: H. R. Clark (chairman, 166N), Boyle, Edwards, Pond.

Assistant Professor: H. V. Andersen.

Instructors: Davies, D. S. Grow, Sandgren, Hamblin.

In order that all students who plan to be graduated with a major in one of the five departments of Accounting, Business Management, Economics, Finance and Banking, and Marketing may have a common background of basic information and tools to facilitate their advanced work, they are required to take the core courses listed below. These courses form a basic training normally to be completed during the first two years of college work and before the student is admitted to a major department. Students in the College of Commerce will be counseled during this program by members of the staff selected by the office of the Dean of the College of Commerce. The required core courses are as follows:

Accounting 1 and 2	10 hours
Business Management 35	5 hours
Business Management 75	5 hours
Economics 1	5 hours
Psychology 11 or substitute approved by counselor	5 hours

The courses in Economics and Psychology listed above apply toward the University general education requirement in social science. In addition to the above courses, it is recommended that many students in these departments will be able to fill the American History and Government requirement best by taking Economics 74 and Political Science 10.

In addition to the above, students majoring in Finance and Banking are required to take Finance and Banking 74, 151, 152, 153, 157, 158, 159, 167, 254, 268; Accounting 1, 2; Business Management 35, 75, 120; Economics 1, 45; and Marketing 107. Recommended: Business Management 130; Economics 194; Finance and Banking 155; Psychology 165.

### Lower Division Course

- 74. Economic and Financial History of the United States. (5)**  
 A.S. Davies  
 (See History 74.)

### Upper Division Courses

- 151, 152. Business Finance. (5)** (151, A.W.S.; 152, W.S.) Pre-requisites: Economics 1, 145; Business Management 120 or equivalent. Clark  
 Financial problems connected with the organization of

corporations, underwriting and the sale of securities, also management, expansion, and the organization of those that are not successful.

153. **Money and Banking.** (4) A. Prerequisite: Economics 145. Clark  
Principles of money and banking and the exemplifications of these principles in the monetary and banking history of the United States.
154. **An Introduction to Commercial Law.** (5) A.W.S. Staff  
Brief examination of the Anglo-American legal heritage; survey of modern American law as it applies to the everyday life and experiences of the citizen (including contracts, negotiable instruments, property, and law as it relates to business associations). Designed for business.
155. **General Insurance.** (5) W. Prerequisite: Economics 145. Recommended: Business Management 120. Boyle  
Life, health, accident, fire, property, and liability insurance, and principles of risk-bearing as they apply to each classification of the insurance field. (See also Business Management 155.)
156. **Real Estate Finance and Development.** (4) S. Prerequisite: Accounting 150 or Business Management 120. Grow
157. **Commercial Law.** (4) A. Sandgren  
Fundamental legal principles and institutions; the formation, operation, effect, and performance of contracts.
158. **Commercial Law.** (4) W. Sandgren  
Laws governing (a) negotiable instruments and the rights and liabilities of parties thereto, (b) real and personal property, and (c) sales and bailments of personal property.
159. **Commercial Law.** (4) S. Sandgren  
Laws governing relationships arising out of business associations: agency, partnerships, and corporations. Examination of the leading cases decided by the courts.
167. **Government Finance.** (5) W. Pond  
The financing of federal, state, and local government. Includes a study of expenditures; principles and practices of budgeting; governmental revenues, with emphasis on problems of taxation; and public debt.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

201. **Research in Business Finance.** (2-5) A.W. Clark
254. **Investments.** (5) S. Prerequisites: 151; Accounting 150 or  
Business Management 120. Edwards
255. **Research in Investments.** (2) S. Edwards
268. **Economics of Finance.** (5) W. Edwards  
(See Economics 268.)
300. **Thesis for Master's Degree.** Staff

## French

(See courses in Modern and Classical Languages.)

## Geography

Assistant Professor: Tuttle (chairman, 296 ESC), Reeder.

Instructors: Fisher, Layton.

The Department of Geography serves three classes of students: (1) professional major students; (2) non-professional major students, who wish to build a broad cultural education around a central interest in geography; (3) students majoring in other fields who wish some acquaintance with the contribution of geography to the understanding of the world and its problems.

For majors the department provides work in the following general fields of specialization: area analysis, cartography, regional planning.

The following courses in geography are required for a major:

**Lower Division.** Geography 11, 23, 75. Geology 1.

**Upper Division.** Geography 100, 103; at least two of the following regional courses: 110, 120, 130, 140, 150; at least two of the following systematic courses: 160, 165, 171, 172, 173, 176; Geography Seminar 199; and electives in Geography to make a total of 45 hours.

### Lower Division Courses

- 11. Introduction to Geography.** (5) A.W.S. (GER-SS) Tuttle

A general survey of man's use of his natural environment including a study of landforms, climates, soil, natural resources.

- 12. Geography in World Affairs.** (5) A.W.S. (GER-SS)

Fisher

An introduction to world geography emphasizing the regions, resources, and economic activities of the major political areas of the world. This course is designed for students who desire to know something of how world affairs are affected by the way man occupies the earth, but who are able to devote only one course to geography.

- 21. Geography of Utah.** (3) W.

Layton

A detailed regional study of the state, with special emphasis on the cultural and economic relationships of Utah to the nation.

- 23. Economic Geography.** (3) A.S. (GER-SS)

Layton

A brief survey of the world's resource pattern. Origin, importance, and movement of major commodities in world affairs.

- 75. Cartography.** (3) A. Two lectures and one two-hour laboratory.

Layton

Maps as tools for teaching and research. Sources of maps and interpretation of map data.

## Upper Division Courses

- 100. Geography of Climates.** (3) A. Prerequisite: Consent of instructor. Tuttle  
A study of climate, one of the most important of all the geographic factors, including climatic elements, controls, distribution, and classification.
- 103. Map Graphics.** (3) W. Prerequisite: Consent of instructor. Layton  
Maps as a means of recording information. Methods of illustrating various types of data and preparation of maps for reproduction and publications. One lecture and two two-hour laboratories.
- 105. Physiography of North America.** (3) S. Prerequisite: Consent of instructor. Tuttle  
A study of the characteristics of the landforms of the continent.
- 110. North America.** (5) A. (GER-SS) Tuttle  
The geography of the United States, Alaska, and Canada, including the study of climates, landforms, natural resources, agriculture, and industries.
- 120. Latin America.** (5) A. Prerequisite: Consent of instructor. Layton  
Physical and cultural landscapes of the geographic regions of South and Central America.
- 130. Europe.** (5) A. (GER-SS) Fisher  
A study of the land and how man is utilizing the natural and human resources of Europe. Specific emphasis will be placed on the human geography of the major political regions.
- 140. Asia.** (5) W. Prerequisite: Consent of instructor. Tuttle  
The geography of one-third of the earth and two-thirds of its people. A study of man's use of his natural environment on the world's largest continent.
- 150. Africa.** (5) W. Fisher  
A systematic regional treatment of the physical, economic, political, and cultural geography of Africa.
- 160. Industrial Geography.** (5) S. Layton  
An analysis of major industries in the United States with regard to location of raw materials, present technology, and markets.
- 165. Urban Geography.** (3) W. Layton  
A survey of the location, development, and functions of various urban areas.
- 171. Foundations of National Power (The Americas).** (3) A. Fisher  
(See Political Science 171.)
- 172. Foundations of National Power (Europe).** (3) W. Fisher  
(See Political Science 172.)



- 173. Foundations of National Power (Near and Middle East).**  
 (3) S. Reeder  
 (See Political Science 173.)
- 176. Political Geography.** (5) S. Prerequisite: Consent of instructor. Fisher  
 A study of location, human and natural resources, economics, politics, and other factors which contribute to the foundation of national power for the world's major areas. This course should be of special interest to students in geography, history, political science, and education. (See also Political Science 176.)
- 195. Readings.** (1) A.W.S. Staff  
 For majors only. May be repeated for a total of three hours.
- 199. Seminar.** (1) A.W.S. Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to registration** and meets the same requirements made of the graduate students.

- 205, 206, 207. Research.** (1-2) A.W.S. Staff  
 For majors only.
- 211. United States.** (3) W. Tuttle
- 221. South America.** (3) W. Layton
- 222. Caribbean Area.** (3) S. Layton
- 231. Western Europe and the Mediterranean.** (3) A. Fisher
- 232. Eastern Europe and the U.S.S.R.** (3) S. Tuttle
- 241. Orient.** (3) S. Tuttle
- 263. Historical Geography of the United States.** (3) S. Fisher  
 (See History 263.)
- 290. Geography of Underdeveloped Areas.** (3) W. Fisher
- 295. Readings.** (1) A.W.S. Staff  
 May be repeated for a total of three hours. For majors only.
- 299. Graduate Seminar.** (1) A.W.S. Staff
- 300. Thesis for Master's Degree.** Staff

### Geological Engineering Science

(See courses in Engineering Sciences.)

## Geology

Professors: Bissell (chairman, 291 ESC), Farnsworth, G. H. Hansen.

Associate Professors: Bullock, Jacob.

Assistant Professor: Rigby.

Instructors: Hyatt\*, Lewis\*.

All students majoring in Geology should complete the following four-year course or its equivalent to obtain the bachelor's degree. Double-starred courses are recommended but not required. From the single-starred courses the Senior may choose a total of 15 hours (in excess of graduation requirements) to apply toward Graduate credit.

It is expected that a student intending to major in Geology shall have met the general entrance requirements of the College of Physical and Engineering Sciences as stated on page 405 of this catalog.

Freshman Year	A	W	S
Religion .....	2	2	2
Physical Education and Health .....	1	1	2
English 1, 2, 3 or 11, 12, 13 .....	3	3	3
Mathematics 11, 12, 13 .....	5	5	5
Chemistry 14, 15, 16	5	5	5
Totals Hours .....	16	16	17

Sophomore Year	A	W	S
Religion .....	2	2	2
Chemistry 14, 15, 16 or Geology 11, 12, 13 ..	5	5	5
Geology 117, 118, 119	3	3	3
**Mathematics 91, 92, 93 .....	(4)	(4)	(4)
Biological & Social Science Groups ....	5	4	5
Humanities and Aesthetics group ..	3	3	3
Total Hours .....	17	17	17
or .....	18	17	18

Junior Year	A	W	S
Religion .....	2	2	2
Physics 41, 42, 43 or 31, 32, 33 .....	5	5	5
Geology 128, 129, 115	5	4	3
Biological & Social Sciences groups or Geology and other options (if groups are filled) .....	5	6	7
Total Hours .....	17	17	17

Senior Year	A	W	S
Religion .....	2	2	2
Geology 171, 172, 130	5	3	3
Geology 140, 141, 180	5	3	5
Electives (and groups not filled	6	9	7
Total Hours .....	18	17	16

Summer School	
Geology 160 .....	8

If Calculus is not elected by the student, these courses are recommended in the Sophomore year: Botany 2; History 70; Geography 23, 75; Archaeology 1; Zoology 11 is required. If Calculus is elected, these groups can be filled during Senior year.

For Geological Engineering Science, see Department of Engineering Sciences.

### Lower Division Courses

1. **Introduction to Geology.** (3) A.W.S. (GER-PS) Lectures M. W.F. and laboratory by demonstration, plus field trips including a two-day trip through central and southern Utah (Bryce and Zion Canyons, etc.). May be taken with or without Geology 2. Staff

A cultural course dealing with physical and historical geology. Designed for the non-science student who desires a broad introduction to earth science.

2. **Introduction to Geology Laboratory.** (1) A.W.S. (GER-PS) One two-hour section per week. Designed to accompany Geology 1 if student desires, but cannot be taken separately. Staff

Laboratory exercises (and some field trips) in which the common rock-forming and ore minerals and fossils will be studied.

11. **Physical Geology.** (5) A.W.S. (GER-PS) Four lectures and one two-hour laboratory section per week. Staff

A course covering the field of physical geology. The common rock-forming and ore minerals and common rocks will be studied in the laboratory. Required of geology majors.

12. **Historical Geology.** (5) A.W.S. Four lectures and one two-hour laboratory section per week. Prerequisite: Geology 1 or 11. Staff

A continuation of Geology 11, constituting a study of the history of the earth and the evolution of the life forms. Representative fossils will be studied in the laboratory.

13. **Introductory Field Geology.** (5) S. Three lectures and field work Thursday 11:00 a.m. to 6:00 p.m., and some Saturdays. Staff

A continuation of Geology 12, involving the principles of stratigraphy, introduction to paleontology, and applied physical and historical geology. For geology majors.

91. **Geology for Engineers.** (4) A.W.S. Three lectures and one two-hour laboratory section per week. Staff

A study of geologic principles which relate to engineering practice. (See Geological Engineering 91.)

92. **Historical Geology.** (4) W. Three lectures and one two-hour laboratory section per week. Staff

A continuation of Geology 91 for Geological Engineers. (See Geological Engineering 92.)

## Upper Division Courses

106. **Geomorphology.\*** (5) S. Four lectures and one two-hour laboratory section per week. Staff  
A study of the processes at work on the land surface and the topographic forms produced by them.
107. **Soil Geology.\*** (3) S. Two lectures and one two-hour laboratory section per week. Farnsworth  
(See Agronomy 107.)
110. **Materials of Ceramics.** (3) (Not given this year.) Hyatt  
Designed to acquaint students of both fine art and industrial art with the clays and other materials used in pottery, porcelain, and other ceramic whitewares, as well as the methods of reproducing ceramic objects. All steps involved in production of ceramic objects are given to aid both amateur hobbyist and commercial ceramist.
115. **Geologic Illustration.** (3) S. Prerequisites: Mathematics 12, Geology 128. Staff  
Office practice in the planning and preparation of geologic maps, structure sections, and other geologic illustrations for professional reports.
117. **Introductory Mineralogy.** (3) A. Two lectures and one two-hour laboratory section per week. Bullock  
An introductory study of the natural occurrence of minerals; their chemical composition and uses; and their important physical properties, including elementary crystallography. Emphasis will be placed upon the rock-forming minerals.
118. **Economic Mineralogy.** (3) W. Two lectures and one two-hour laboratory section per week. Prerequisites: Chemistry 16; Geology 117. Bullock  
(A continuation of Geology 117.)
119. **Rocks.** (3) S. Two lectures and one two-hour laboratory section per week. Prerequisite: Geology 118. Staff  
Megascopic study and classification of the important igneous, sedimentary, and metamorphic rocks.
125. **Gemology.** (2) (Not given this year.) Staff  
Lecture and demonstration of the properties, history, and lore of the common and classic gems and gem material.
128. **Structural Geology.** (5) A. Prerequisites: Geology 119; Mathematics 12. Staff  
Structural features of the earth's crust and the forces which have produced these structures; interpretation of geologic maps and mineral fragments.
129. **Map and Photo Interpretation.** (4) W. Prerequisite: Geology 128. Staff  
Use and interpretation of maps and aerial photographs.

- 130. Geological Field Methods.** (3) S. Prerequisite: Geology 129. Staff  
 Training in the methods of geological field work; use of the Brunton Compass, hand level, altimeters, steel tape, stereoscope, aerial photographs. Emphasis is placed on the use of the plane-table and alidade in topographic mapping for the solution of geologic problems. (See Geological Engineering 132.)
- 140. Optical Mineralogy.** (5) A. Prerequisite: Geology 118. Bullock  
 An introduction to optical identification of minerals from thin sections and mineral fragments.
- 141. Petrography.** (3) W. Prerequisite: Geology 140. Bullock  
 A description and classification of rocks, including laboratory studies of thin sections of rocks.
- 150, 151. Introduction to Applied Geophysics.\*** (3-3) W.S. Prerequisite: Consent of instructor. Jacob  
 Outline of methods of geophysical prospecting in mining, petroleum, and engineering geology.
- 160. Summer Field Course.** (8) (Summer only. See Summer Catalog.) Prerequisite: Geology 130. Staff  
 A six weeks course in geological mapping. Emphasis is placed on the quantitative solution to geological problems in engineering, petroleum, and mining. (See Geological Engineering 160.)
- 171. Invertebrate Paleontology.** (5) A. Three lectures and two two-hour laboratory sections per week. Prerequisites: Geology 12. Rigby  
 Systematic study of the invertebrate animal kingdom. Introduction to the study of the structure, mode of life, distribution, and development of the living invertebrates of the past ages. Typical fossils of each group will be studied.
- 172. Principles of Sedimentology.** (3) W. Prerequisite: Geology 140. Bissell  
 An analytical study of sediments, their origin, constitution, and relations. (See Geological Engineering 172.)
- 180. Principles of Economic Geology.** (5) S. Prerequisite: Geology 128. Staff  
 A study of the origin, mode of occurrence, classification, and use of the more important metallic ores and non-metallic mineral products.
- 196. Readings in Geology.** (1-6. No more than one hour any quarter.) A.W.S. Staff  
 Open only to geology majors during their junior and senior years.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced

undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

- 201, 202, 203. **Research.** (1-3, 1-3, 1-3) A.W.S. Staff  
Special problems in the field of geology designed for students prepared to do original work.
204. **Advanced Physical Geology.** (3) A. Prerequisite: Geology 130. Bissell
205. **Advanced Historical Geology.** (3) W. Bissell  
Continuation of Geology 204.
210. **Geology of Utah.** (3) A. Hansen
- 217, 218. **Geochemistry.** (3-3) A.W. Staff
219. **Engineering Geology.** (4) S. Jacob
230. **Problems in Structural Geology.** (1-5) A.W.S. Staff
231. **Geology of the U.S.** (5) W. Hansen
250. **Advanced Optical Mineralogy.** (5) A. Prerequisite: Geology 118. Bullock
251. **Petrography and Petrofabrics.** (3-5) W. Prerequisite: Geology 140 or 250. Bullock
252. **Igneous and Metamorphic Petrology.** (5) S. Prerequisite: Geology 128. Bullock
- 260, 261, 262. **Advanced Field Geology.** (1-5, 1-5, 1-5) A.W.S. Staff
269. **Micropaleontology.** (3) W. Prerequisite: Geology 12. Rigby
270. **Vertebrate Paleontology.** (3) W. Prerequisite: Geology 12. Rigby
271. **Index Fossils.** (3) S. Prerequisite: Geology 171. Rigby
272. **Biostratigraphy.** (3) W. Prerequisite: Geology 171. Rigby
273. **Sedimentology.** (3) A. Prerequisite: Geology 172. Bissell
274. **Sedimentary Petrology.** (3) W. Prerequisite: Geology 172. Bissell
275. **Sedimentary Petrography.** (2) W. Prerequisite: Geology 140. Bissell
276. **Sedimentation and Stratigraphy.** (3-5) S. Bissell
277. **Petroleum Geology.** (5) S. Prerequisite: Geology 128. Hansen
278. **Subsurface Geology.** (3) W. Prerequisite: Geology 128. Lewis
281. **Metalliferous Deposits.** (5) S. Prerequisite: Geology 180. Staff

283. **Non-Metalliferous Deposits.** (3) W. Prerequisite: Geology 180. Staff
284. **Geology of Ceramic Raw Materials.** (3) S. Hyatt
285. **Ground Water.** (5) A. Prerequisite: Geology 128. Jacob
- 291, 292, 293. **Seminar.** (1-1-1) A.W.S. Staff
296. **Readings in Geology.** (1) A.W.S. Staff  
Total of six registrations permitted.
300. **Thesis for Master's Degree.** (1-6) Staff

## German

(See courses in Modern and Classical Languages)

## Graphics

(See courses in Engineering Sciences and in  
Industrial Art and Drawing.)

## Greek

(See courses in Modern and Classical Languages  
and in Religion.)

## Health Education and Safety

Professors: Allen, Barlow, J. V. Beck, C. J. Hart, Nash, Nicholes.

Associate Professor: V. W. Larsen.

Assistant Professors: Robison (acting chairman, 216 FH), Soffe\*, C. Taylor.

Instructors: Bangerter, Barney, Geddes\*.

### HEALTH EDUCATION MAJOR

Students desiring to major in Health will take the following courses: Health 1, 21, 50, 110, 133, 143, 157, 160, 165, 166, 195 along with certain other courses outlined by the major department.

### HEALTH EDUCATION MINOR

Students may minor in Health Education by completing the following courses: 21, 45, 50, 143, 157, 160, 195, and Zoology 11.

### Lower Division Courses

1. **Personal Hygiene.** (1) A.W.S. Two lectures per week.

Robison, Barney

This course is required of all freshman students. May be taken any quarter during the freshman year. The course is designed to present in a popular manner problems concerning personal hygiene and proper health habits.

21. **Bacteriology.** (4) A.W.S. (See Bacteriology 21.) J. V. Beck

45. **Vertebrate Anatomy and Physiology.** (5) A.W.S. Three lectures and two two-hour laboratory periods per week.

H. Nicholes

Required of majors in physical education. (See also Zoology 45.)

50. **Elementary Nutrition.** (3) A.W.S. Barlow

The study of the fundamentals of nutrition and the use of the diet in maintaining physical fitness. Open to men and women. Required of majors in physical education. (See Foods 50.)

### Upper Division Courses

110. **Studies in Alcohol Education.** (2) (Not given this year.) Two periods each week.

The nature and effects of alcohol on the human organism. Consideration will be given the effects of alcohol on heredity, the developing cell, body resistance, longevity, morbidity, mentality, and man's conduct.



- 130. Clinical Psychology.** (3) W. Prerequisite: Psychology 11 or equivalent. Allen  
A consideration of diagnostic or remedial procedures for personality and behavior difficulties. Recommended for teachers of health.
- 133.\* Administration of School Health Program.** (3) S. Nash  
The problems of the School Health Coordinator and his place in the administrative structure of the school—secondary or elementary. Duties and responsibilities of the School Health Director in coordinating the offerings in science, social science, homemaking, and other areas in the light of a total health program. The membership and responsibility of the School Health Coordinating Committee.
- 143. Mental Hygiene.** (3) S. Prerequisite: Psychology 11 or equivalent. C. Taylor  
(See Psychology 143.)
- 157. Materials and Methods in Safety Education.** (2) A. Bangerter  
The course will emphasize school safety, safety in the home, bicycle and traffic safety, and other areas of safety of concern to the educator. (See Instruction 171.)
- 158. Health Education for Teachers.** (3) A.W.S. Robison  
The fundamental principles of health and their application to school and home situations. Designed especially for those who are preparing to teach in the public school. (See Instruction 170.)
- 160. Sanitation and Public Health.** (3) S. Larsen  
(See Bacteriology 160.)
- 165. General Physiology.** (5) W. Three lectures, two two-hour laboratory periods per week. Prerequisite: Zoology 11. A course in organic chemistry is recommended. H. Nicholes  
(See Zoology 165.)
- 166. Human Physiology.** (5) S. Three lectures, two two-hour laboratory periods per week. Prerequisite: Zoology 13, 165. H. Nicholes  
(See Zoology 166.)
- 195. First Aid.** (2) A. Soffe  
Principles and practices in first aid treatment of injuries. Those successfully completing the course will be given the American Red Cross First Aid Certificate.

## History

Professors: L. R. Hafen, Jensen (emeritus), Nibley, R. B. Swensen.

Associate Professors: Poll (chairman, 254 McK), Caldwell S. L. Grow, B. S. Jacobs.

Assistant Professors: Carr, Hunt, Reeder, Tyler.

Instructors: M. W. Cannon, Davies, Fielding, A. L. Fisher, Jones, Riggs.

### REQUIREMENTS FOR MAJOR IN HISTORY

A History major requires the completion of 45 hours of work in this field. History 10, 11, 12; 20, 21 or 180, 181, 182; 188, 189, and 190 are required courses. The remaining elective hours shall be selected in consultation with the department chairman.

A student deciding to major in History should immediately consult the chairman of the department, who will assist in the selection of the minor field.

History is one of the subjects comprising the composite major in social science. (See College of Education.)

In this department, courses not offered this year will be given the following year.

### AMERICAN HISTORY AND GOVERNMENT REQUIREMENT

Satisfactory completion of course work in American History and Government is required of all candidates for a bachelor's degree from any of the colleges of the University. History 70, History 80, or any of the following combinations of courses satisfies this requirement:

History 20 and 21.

History 20 and Political Science 10.

History 21 and Political Science 10.

History 74 and Political Science 10.

History 180, 181, 182.

Students majoring or minoring in history should **not** take History 70 or 80.

A student in the department of Economics, Finance and Banking, Journalism, Political Science, or Instruction (Social Sciences) should elect the combination appropriate to his field.

Transfer students desiring to offer work from other institutions to satisfy this requirement should consult the chairman of the History Department for clearance.

History 70 or 80 is credited toward the fulfillment of the Social Science group requirement. Other courses taken to satisfy

the American History and Government requirement also are credited toward group requirements, the history courses applying in the Humanities group and the political science in the Social Science group.

### Lower Division Courses

**5. Current Affairs. (2) A.W.S. Poll**

A survey of current events, with special attention to their historical background and present implications in economics, sociology, politics, and international relations.

**10. Ancient Civilization. (5) A.S. (GER-HA) Swensen**

A survey of the ancient civilizations which developed in the important Oriental, Greek, and Roman states.

**11. Medieval and Early Modern Europe. (5) A.W. (GER-HA) Swensen**

A study of the political, social, economic, and religious trends of Europe from the disintegration of the Roman Empire in the fifth century A.D. to the Reformation in 1517.

**12. Modern and Contemporary Europe, 1517 to the Present. (5) (GER-HA) W.S. Wilson Staff**

An examination of the political, economic, social, and intellectual development of Europe since 1517.

**20. The United States to 1865. (5) A.W.S. (GER-HA) Fielding, Hafen**

The era of discovery and colonization, the American Revolution, the Constitution and the development of national government, foreign affairs, westward expansion, sectionalism, and the Civil War.

**21. The United States since 1865. (5) A.W.S. (GER-HA) Hunt, Poll**

Consequences of the Civil War and Reconstruction, industrialization and urbanization, American imperialism, the period of reform, the first and second World Wars, the New Deal, current problems.

**70. The American Heritage. (5) A.W.S. (GER-SS) Staff**

The growth of the United States under the Constitution, with emphasis upon the English political and legal background, the winning of independence, the objectives and accomplishments of the founders of the republic, the testing of the Union in the period culminating in the Civil War, and the adaptation of the constitutional system to America's role as an industrial and world power.

**74. Economic and Financial History of the United States. (5) A.W.S. (GER-HA) Davies**  
(See Economics 74.)

80. **The American Heritage.** (5) A.W.S. (GER-SS) Staff  
Advanced sections of the basic course in American history and government (See History 70). Enrollment determined by results of freshmen aptitude and achievement tests. No student who has had History 70 should enroll in History 80.

### Upper Division Courses

100. **Early Oriental History.** (3) A. (GER-HA; GER-R) Nibley  
A study of ancient civilization as it developed in Egypt, Babylonia, Assyria, Arabia, Persia, and Palestine. This course is helpful to those who are especially interested in the rise of the Jewish religion and scriptures.
101. **History of the Far East.** (3) W. (GER-HA) Swensen  
A survey of the development of the civilizations of the eastern Oriental countries of India, China, and Japan. Emphasis upon their unique cultural achievements and the significant trends of the present.
103. **Literary History of the Greeks.** (3) W. Nibley  
Greek life and thought as illustrated in the writings of classical authors.
104. **Greek History to 323 B.C.** (3) A. (GER-HA) Swensen  
The political, economic, social, and intellectual development of the Greek people from their migration into the Aegean area to the time of Alexander the Great. Major emphasis on the classical civilization of the Periclean Age.
105. **Greek History from 335-146 B.C.** (3) S. Swensen  
The decline of the Greek city-state, Alexander the Great, the expansion of Greek civilization, the rise and fall of the Hellenistic monarchies. Emphasis upon the political innovations of the Greek Leagues and the cultural achievements of the Hellenistic Age.
107. **Roman History to 31 B.C.** (3) (Not given this year.) (GER-HA) Swensen  
A study of Roman history from the monarchical period to the end of the Republic. Emphasis upon the growth of the political principles and constitutional structures of the Romans which are still significant, and the career of Caesar.
108. **History of the Roman Empire, 31 B.C. to 493 A.D.** (3) W. Swensen  
A study of the factors and institutions which were instrumental in the development of the Roman Empire, the causes of its decline, the unique features of its civilization, and the rise and expansion of Christianity.
109. **Literary History of the Roman Empire.** (3) S. Nibley  
Study of the decline of ancient civilization, its causes, symptoms, and attendant social and cultural developments, as reflected in contemporary writings. To 1453,

- 111. Medieval Germany and the Papacy.** (3) A. Staff  
The growth and conflicts of the Holy Roman Empire of Germany and the Roman Catholic Church, the causes of the breakdown of the former and the strength of the latter, their distinctive cultural and institutional achievements.
- 112. The Renaissance and Reformation.** (3) S. (GER-HA; GER-R) Swensen  
A study of the cultural trends and developments of the Renaissance, the background and movements of the Reformation together with the Catholic reaction in the Counter-Reformation.
- 123. History of Europe, 1914-1954.** (3) (Not given this year.) Staff  
(GER-HA)  
The political, economic, and social history of contemporary Europe, with emphasis upon international relations and the background of current affairs.
- 130. History of Russia to 1900.** (3) W. Poll
- 131. History of Russia Since 1900.** (3) S. (GER-HA) Poll  
Survey of the main trends in Russian development, with emphasis upon those factors which contribute to an understanding of the U.S.S.R. today. Either quarter may be taken independently.
- 135. The French Revolution.** (3) S. Staff  
A history of France and Europe during the French Revolution, including the Ancient Regime and the Napoleonic Era.
- 136. History of Germany.** (3) (Not given this year.) Staff  
A study of the German transition from the Reformation to the present time, with emphasis on the nationalistic period from the Congress of Vienna to World War II.
- 140. History of England to 1714.** (3) A. (GER-HA) Staff  
A study of the origin and development of the English people and English institutions from the earliest times to 1714. Special consideration is given to the Tudor period and to the evolution of parliamentary sovereignty.
- 141. History of England Since 1714.** (3) W. GER-HA) Staff  
Development of cabinet government; economic and humanitarian movements; growth of the empire and the relation of Britain to her colonies and dominions; First and Second World Wars; post-war problems.
- 142. History of the British Empire since 1783.** (3) S. (Not given this year.) Carr  
The evolution and growth of the British Empire; the development of the British Commonwealth of Nations; recent economic, political, and constitutional problems.
- 148. History and Government of Canada.** (3) (Not given this year.) Grow  
A study of the founding and development of Canada to the present day.

150. **History of Latin America: Colonial Period.** (3) A. Hunt  
A study of the geography, pre-Columbian civilizations, conquest, and institutional development of Latin America from 1492 to 1800.
151. **History of Latin America: Modern Period.** (3) W. Hunt  
The wars of independence; evolution of modern republics; cultural development; inter-American relations, 1800 to present.
153. **History of Mexico.** (3) (Not given this year.) Hunt  
Survey of conquest and growth under Spain; winning of independence; emergence and development as a modern nation.
160. **History of the American Frontier.** (3) S. Hafen  
Significance of the frontier in the development of the United States; the Anglo-American advance to the Mississippi River and the exploration and development of the Southwest, the Great Basin, and the Pacific West.
161. **The Indian in American History.** (3) A. Hafen  
Relations between the Europeans and the Indians, conflict and gradual cultural exchange, the Indian as a citizen in the American nation today.
162. **The American Westward Movement to 1825.** (5) A. Hafen  
The exploration, settlement, and development of the Trans-Mississippi West through the first quarter of the 19th Century, including the Spanish and French as well as the Anglo-American colonization activity.
163. **The American Westward Movement after 1825.** (5) W. Hafen  
The exploration, settlement, and development of the Trans-Mississippi West from 1825 to the passing of the frontier in the late nineteenth century.
166. **History of Utah.** (3) A.W.S. (GER-HA; GER-R) Poll  
The early history of the Great Basin; the Mormon migration; economic, social, and political developments; problems of territorial government and the attainment of statehood.
171. **American Civilization.** (4) (Not given this year.) Jacobs  
(See English 141.)
172. **American Civilization.** (4) (Not given this year.) Jacobs  
(See English 142.)
173. **Social History of the United States.** (3) S. (GER-HA) Hafen  
Survey of changes in American life since colonial times, emphasizing intellectual and cultural achievements and the impact of industrialization and urbanization.
175. **American Constitutional Development.** (3) W. Prerequisite: Political Science 10. Jensen  
The history and development of the Constitution of the United States, its fundamental provisions, their interpretation and their application in the functioning of the American system of government. (See Political Science 185.)

- 176. History of American Political Thought.** (3) S. Jensen  
An examination and interpretation of American political ideas from the colonial period to the present, with an analysis of their influence upon the development of American history and government. (See Political Science 106.)
- 179. Contemporary United States History, 1919-1956.** (3) A. (GER-HA) Poll  
Designed to facilitate understanding of current affairs. Emphasis placed upon the nature of the depression of 1929 and the New Deal, the diplomacy of isolationism and the Second World War, and post-war problems.
- 180. The United States to 1789.** (3) A. Prerequisite: History 10, 11, 12. Hafen  
A course for upper division students majoring in education. Emphasis upon interpretation methods, and materials useful in teaching American History in secondary schools.
- 181. The United States, 1879 to 1896.** (3) W. Prerequisite: 180 or permission of the instructor. Fielding  
Continuation of History 180.
- 182. The United States since 1896.** (3) S. Prerequisite: 181 or permission of the instructor. Poll  
Continuation of History 181.
- 184. American Diplomatic History.** (3) S. Fielding  
The role of the United States in international affairs from colonial times to the present. Emphasis will be placed upon the diplomacy of expansion, the Monroe Doctrine, and problems of the Twentieth Century.
- 185. Contemporary Problems.** (3) A.W.S. Poll  
Studies of selected current problems, with special attention to their historical background and present implications in economics, sociology, politics, and international relations.
- 188. Historiography.** (3) A. (Recommended for the junior year.) Swensen  
A course in the fundamental problems and types of historical analysis and interpretation. Attention given to various philosophies of history and the work of outstanding European and American historians. Required of all history majors.
- 189. Methods of Historical Research and Thesis Writing.** (3) W.S. (Recommended for the junior year.) Tyler  
Historical sources; the collection and evaluation of material; methods of note-taking; use of micro-film and other special techniques; organization of a historical paper; footnotes and bibliography.
- 190. Senior Seminar.** (2) A.W.S. Hafen, Poll, Swensen  
Research seminar required of all majors in history.
- 198. Special Readings in History.** (Arr.) Staff
- 199. Special Research in History.** (Arr.) Staff

## Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

- |  |          |
|--|----------|
| 206. Greek Philosophers. (3) (Not given this year.)  | Swensen  |
| 212. History of Medieval Thought. (3) W.   | Swensen  |
| 221. Problems in European History, 1500-1956. (3) W.   | Staff    |
| 245. Constitutional History of England. (3) (Not given this year.)<br>Prerequisites: 20, 21, or equivalent.                                      | Staff    |
| 256. History of the Southwestern United States. (3) W.   | Hafen    |
| 263. Historical Geography of the United States. (3) S. Prerequisites: 20, 21, or equivalent.   | Fisher   |
| 270. Colonial American History. (3) A. Prerequisite: 20 or the equivalent.   | Fielding |
| 275. History of the United States, 1783-1815. (3) (Not given this year.) Prerequisites: 20, 21, or equivalent.                                   | Hafen    |
| 276. History of the United States, 1815-1850. (3) S. Prerequisites: 20, 21, or equivalent.   | Hafen    |
| 277. History of the United States, 1850-1877. (3) (Not given this year.) Prerequisites: 20, 21, or equivalent.                                   | Poll     |
| 278. History of the United States, 1877-1919. (3) (Not given this year.) Prerequisites: 20, 21, or equivalent.                                   | Staff    |
| 279. Origin of American Constitutionalism. (3) (Not given this year.)  | Jensen   |
| 286. Constitutional History of the United States. (3) A. Prerequisites: 20, 21, or the equivalent. Pre-law students by permission of instructor. | Jensen   |
| 288. Historiography. (3) Summer only.  | Swensen  |
| 289. Methods of Historical Research and Writing. (2) Summer only.  | Staff    |
| 290. Ancient Historians. (3) (Not given this year.)  | Swensen  |
| 291. European Historians. (3) (Not given this year.)   | Tyler    |
| 292. American Historians. (3) A.   | Tyler    |
| 294. Seminar in Ancient History. (2) S.  | Swensen  |
| 295. Latin American Seminar. (2) A.  | Hafen    |



296. Seminar in American History. (2) (Not given this year.)  
Fielding
297. Seminar in Utah History. (2) W. Poll
298. Special Readings in History. (Arr.) A.W.S. Staff
299. Special Research in History. (Arr.) A.W.S. Staff
300. Thesis for Master's Degree. Staff

## Home Arts

(See courses in Family Living.)

## Home Economics

(See courses in Family Living.)

## Homemaking Education

(See courses in Family Living.)

## Home Management

(See courses in Family Living.)

## Horticulture and Horticultural Specialties

Professors: Harrison, Snell.

Associate Professor: Ashton (chairman, 164B).

Instructor: Reimschiissel.

Students majoring in this department may emphasize either fruit production, ornamental horticulture, or landscape gardening. They must have a strong foundation in supporting fields. Recommended: Botany 1, 104, 140; Chemistry 14, 15, 16; Agronomy 41, 102, 105.

### Lower Division Courses

1. **Principles of Fruit Production.** (3) A.W. Ashton  
Principles underlying the profitable production of tree and small fruits. Varieties, soils, sites, fertilizers, culture, pest control, harvesting, storage, and propagation. Introduction to the field of pomology.
2. **Vegetable Production.** (3) S. Ashton  
Principles and practice of profitable vegetable production.
3. **Beautifying the Home Grounds.** (3) A.W.S. Reimschiissel  
A study of the principles of design and composition as applied to the home ground development and plant culture.
7. **Floriculture.** (3) A.S. Reimschiissel  
Herbaceous plant culture in the greenhouse and out-of-doors is studied.
10. **Small Fruit Production.** (3) W. Ashton  
Principles and practices of the successful and profitable production of small fruits for home and commercial plantings. Special emphasis on new varieties and disease and insect control.
12. **Flower Arrangement.** (3) A.S. Reimschiissel  
A study of the principles and methods of arranging flowers and other plant materials for decorative use in the home and for exhibition.
43. **Architectural Drawing.** Snell  
(See Drawing 43.)

### Upper Division Courses

102. **Plant Propagation.** (3) W. Ashton  
Principles and practices of the propagation of horticultural plants.
103. **Plant Propagation Laboratory.** (2) W. Ashton

112. **Practical Orchard Management.** (5) S. One lecture period and two four-hour laboratory periods per week. Ashton  
Training, pruning, fertilizing, insect control, fruit thinning of orchard trees.
115. **Herbaceous Plants.** (3) (Not given this year.) Prerequisites: Botany 1, 3. Reimschiissel  
A study of the important ornamental herbaceous plants in Utah.
116. **Woody Plants.** (3) S. Prerequisites: Botany 1, 3. Reimschiissel  
A study of the important ornamental woody plants in Utah.
117. **Nursery Practice.** (2) Staff
118. **Greenhouse Management.** (5) Staff
119. **Turf Management.** (3) Staff
124. **Landscape Design.** (3) W. Prerequisites: Horticulture 3 and 43. Reimschiissel  
Designing private and public home grounds.
130. **Planting Design.** (3) W. Prerequisites: Horticulture 115, 116, and 124. Reimschiissel  
Woody and herbaceous plant composition emphasized for private and public grounds.
152. **Systematic Pomology.** (2) A. Ashton  
Emphasis placed on the identification, description, and nomenclature of fruits and fruit trees.
153. **Harvesting and Storage of Fruits.** (2) A. Ashton  
Problems related to harvesting and storage of fruits and vegetables.
155. **Advanced Pomology.** (5) A. Prerequisites: Horticulture 1. Ashton  
Principles and practices of establishing deciduous orchards.
156. **Orchard Management.** (3) W. Prerequisite: Horticulture 1. Ashton  
Problems related to climate, soil, water, nutrition, varieties.
158. **Weeds and Seed Analysis.** (4) A. Reimschiissel  
The important weeds occurring in Utah and their control. Seeds likely to occur in commercial seed. (See Agronomy 158.)
159. **Plant Breeding.** (3) S. Prerequisites: Botany 1 and Zoology 18 or 29. Ashton  
Methods of hybridizing and selection in relation to plant improvements.

- 170. Plant Pathology.** (5) A. Prerequisite: Botany 1; Botany 102 recommended. Harrison  
A general survey of the occurrence, economic importance, symptoms, causes, and control of the more important diseases of cultivated crops. (See Botany 170.)
- 171. Diseases of Cultivated Fruits.** (3) A. Ashton  
Bacterial, fungus, virus, and nutritional diseases of horticultural plants.
- 191, 192, 193. Seminar.** (1) A.W.S. Ashton  
Current literature will be reviewed. For seniors and graduate students majoring in horticulture or plant pathology.
- 195, 196, 197. Special Problems in Horticulture.** A.W.S. Staff  
Credit and subject matter to be arranged.

## Housing and Design

(See courses in Family Living.)

## Human Development and Family Relationships

(See courses in Family Living.)

## Industrial Arts and Drawing

Professor: Snell.

Assistant Professor: Gamett (chairman, IA).

Instructor: Pierce.

Majors are offered in industrial arts teacher education and vocational industrial arts. Minors are offered in industrial arts, drawing, and farm mechanics. A farm mechanics minor cannot be used with an Industrial Arts major. Twenty-four credit hours are required in a teaching minor.

Credit in shop courses and drawing is given on the basis of three hours for nine hours application each week during the quarter.

For a major, a sequence of courses must be followed as outlined by the department.

### TEACHER-EDUCATION CURRICULUM

The department offers the student a program which will meet the state requirements for a certificate for teaching industrial arts. Practice and theory are combined and the student not only learns how to teach the industrial arts, but also masters the skills and techniques of basic operations.

For a minor in art a student should include in his program a minimum of two hours in design, four hours in drawing, three hours in history of art, and four hours in interior design. Suggested courses may be selected from the following: Art 10, 11, 12, 21, 22, 23, 27, 33, 39, 50, 56, 59, 63, 104, 107, 108, 113, and 114.

### TEACHING MAJOR

Twenty-four hours is the minimum requirement for a teaching minor and it may be taken in Art or any field related to Industrial Arts. The program below is arranged for an Art minor.

Freshman Year	A.	W.	S.	T.	Sophomore Year	A.	W.	S.	T.
Mathematics 1 or 12 .....	5	0	0	5	Art .....	2	2	0	4
English 1, 2, 3 ....	3	3	3	9	Psychology 11 ....	0	5	0	5
History 70 .....	0	5	0	5	Economics 1 .....	0	0	5	5
Health Ed. 1 ....	0	0	1	1	Religion .....	2	2	2	6
Phys. Ed. ....	1	1	1	3	Botany 1 .....	5	0	0	5
Art .....	2	2	2	6	Sociology 13 .....	0	0	2	2
Ind. Arts 30, 31, 64 .....	3	3	2	8	Physics 26 .....	0	0	4	4
Ind. Arts 16 ....	0	0	2	2	Ind Arts 10, 11, 12 .....	3	3	3	9
Religion .....	2	2	2	6	Ind. Arts 19 .....	2	0	0	2
Educ. Values and Programs 30 ....	0	0	1	1	Drawing 4, 43 ....	2	3	0	5
Psychology 1 ....	0	0	2	2	Electives .....	2	2	2	6
Electives .....	2	2	2	6					
<b>Total Hrs. ....</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>54</b>	<b>Total Hours ....</b>	<b>18</b>	<b>17</b>	<b>18</b>	<b>53</b>

Junior Year	A.	W.	S.	T.
Religion .....	2	2	2	6
English Electives .....	3	3	3	9
Instruction 170 ....	3	0	0	3
Educ. Adm. 100 .....	0	0	3	3
Research & Psychological Services 100 .....	0	5	0	5
Instruction 150 ....	0	0	3	3
Educ. Values and Programs 100 or 115 or 116 ..	0	0	3	3
Ind. Arts 28, 123, 127 .....	2	3	3	8
Art .....	2	2	2	6
Physics 1 .....	3	0	0	3
Electives .....	3	3	0	6

Total Hours ....18 18 19 55

Note: R.O.T.C students will need 30 hours of R.O.T.C. training, which may be taken in place of the electives shown.

### MAJOR IN INDUSTRIAL ARTS

(Minor in Drawing)

The following provides for a major in Industrial Arts for students not interested in teaching.

Freshman Year	A.	W.	S.	T.
Mathematics 1 or 12 .....	5	0	0	5
English 1, 2, 3 ....	3	3	3	9
History 70 .....	0	5	0	5
Health Ed. 1 .....	0	0	1	1
Phys Ed. ....	1	1	1	3
Drawing 4, 43, 44 ..	2	3	3	8
Ind Arts 30, 32 .....	0	3	3	6
Religion .....	2	2	2	6
Psychology 1 ....	0	0	2	2
Physics 1 .....	3	0	0	3
Electives .....	2	2	2	6

Total Hours ....18 19 17 54

Junior Year	A.	W.	S.	T.
Religion .....	2	2	2	6
English Electives .....	3	3	0	6
Ind Arts 170 ....	3	0	0	3
Ind. Arts 116, 117 ..	0	3	3	6
Ind. Arts 171 ....	0	3	0	3
Ind. Arts 128, 123, 127 .....	2	3	3	8
Ind. Arts 122 ....	0	0	2	2
Ind. Arts 110, 112 ..	3	0	3	6
Electives .....	3	3	3	9

Total Hours ....16 17 16 49

Senior Year	A.	W.	S.	T.
Instruction 151 ....	3	0	0	3
Ed. Res. 145 .....	3	0	0	3
Religion .....	2	2	2	6
Instruction 120, 138, 139 .....	4	5	7	16
Ind. Arts 100, 145, 160 .....	3	4	3	10
Art .....	2	2	2	6
Electives .....	0	6	3	9
Total Hours .....	17	19	17	53

Sophomore Year	A.	W.	S.	T.
Drawing 40, 45 ..	2	3	0	5
Psychology 11 ....	0	5	0	5
Economics 1 .....	0	0	5	5
Religion .....	2	2	2	6
Botany 1 .....	5	0	0	5
Sociology 13 .....	0	0	2	2
Physics 26 .....	0	0	4	4
Ind. Arts 10, 11, 12 .....	3	3	3	9
Ind. Arts 28, 19 ..	2	2	0	4
English Electives ..	3	0	0	3
Electives .....	2	2	2	6

Total Hours ....19 17 18 54

Senior Year	A.	W.	S.	T.
Ind. Arts 124, 125, 126 .....	3	3	3	9
Ind. Arts 100, 145, 160 .....	3	4	3	10
Religion .....	2	2	2	6
Drawing 46 .....	0	0	3	3
Drawing 140, 141, 142 .....	3	3	3	9
Electives .....	5	5	3	13

Total Hours ....16 17 17 50

Note: R.O.T.C. students will need 30 hours of R.O.T.C. training in addition to the above schedule which may be taken in place of electives shown.

## Industrial Arts

### Lower Division Courses

10. **Machine Practice.** (3) A.W.S. Three two-hour periods per week. Gamett  
The use of hand tools in bench work, with engine lathe, drill press, and grinding operations.
11. **Acetylene Welding.** (3) A.W.S. Three two-hour periods a week. Pierce  
Fusion welding of mild steel, oxy-acetylene cutting and brazing.
12. **Electric Welding.** (3) A.W.S. Three two-hour periods per week. Pierce  
Fusion welding of mild steel.
16. **Forge Practice.** (3) W. Two two-hour periods per week. Staff  
Fundamental forge operations including bending, shaping, welding, and tempering.
17. **Farm Machinery.** (2) S. Staff  
Care and maintenance of general farm equipment.
18. **Gas and Diesel Engines.** (3-5) W. Staff  
A course designed for agricultural students. Care and maintenance of gas and diesel engines.
19. **Sheet Metal.** (2) W. Prerequisite: Drawing 43. Two two-hour periods per week. Staff  
Projects in sheet metal work and pattern layout involving fundamental machine and hand tool operation.
21. **Wood Turning.** (2) A.W. Gamett  
Exercises and projects in spindle and face plate turning.
- 27 or 127. **Wood and Metal Finishing.** (3) S. Three two-hour periods per week. Gamett  
Preparation of surfaces for the application of finishes. Staining, painting, varnishing, lacquering, polishing, etc. Use of brush and air gun.
28. **Upholstery.** (2) A. Two two-hour periods per week. Gamett  
Typical forms of upholstery, including foundations with and without springs.
30. **Tool Technique.** (3) A.W. Gamett, Pierce  
Care and use of woodworking, hand and machine tools applied in fundamental principles of sawing, joining, fitting, and fastening. Required of all majors and minors in Industrial Arts.

- 31, 32. Cabinet Construction.** (3-3) W.S. Three two-hour periods per week. Prerequisite: Industrial Arts 30. Gamett

Use of hand and machine tools in the construction of fine furniture. Drawings, specifications, and cost estimates of all projects must be submitted.

- 60. Recreational Handicrafts.** (1-3) A.W.S. Pierce

Students may work in a selected area according to their interests such as woodwork, metalwork, plastics, lapidary work, etc. Course is open to all students interested in leisure time activities.

- 63. Crafts.** (2) A.W.S. Leathercrafts. (See Art 63.)

- 64 or 164. Plastics.** (2) S. Two two-hour periods per week. Staff

Fundamental hand and machine operations used in working plastics.

### Upper Division Courses

- 100. Art Metal Crafts.** (3) W. Three two-hour periods per week. Gamett

Projects in metal. Hand tooling in brass, copper, and aluminum; soldering and spinning.

- 110. Machine Practice.** (3) W.S. Prerequisite Industrial Arts 10. Gamett

Operations in the use of the lathe, shaper, and milling machines.

- 112. Welding.** (3) A.W.S. Prerequisites: Industrial Arts 11 and 12. Pierce

Advanced work in acetylene and electric welding.

- 116. Carpentry.** (3) W. Three two-hour periods each week. Prerequisites: Drawing 4 or 43. Gamett

Practical problems in forming framing, sheathing, and insulation.

- 117. Carpentry.** (3) S. Three two-hour periods each week. Prerequisite: Industrial Arts 116. Gamett

Practical problems in interior and exterior trim.

- 122. Masonry.** (2) S. Pierce

Practice in laying up cinder or concrete blocks into simple walls as needed for farm structures.

- 123. Machine and Tool Maintenance.** (3) Three two-hour periods per week. Gamett

Care, sharpening, and maintenance of woodworking tools, machines, and supplementary equipment.

- 124. Mill Work-Woodworking Machinery.** (3) A. Three two-hour periods per week. Prerequisites: Industrial Arts 30 and Drawing 44. Gamett

Work will be handled as nearly as possible as in actual



practice. Estimates and working drawings will be made and a careful check of material and labor kept and computed for each job.

- 125, 126. Shop Work.** (3-3) W.S. Three two-hour periods per week. Prerequisites: Industrial Arts 30. Gamett  
Advanced work, consisting of the erection of buildings, cabinet work, upholstery, pattern work, or novelty work.
- 128. Upholstery.** (2) W. Prerequisite: Industrial Arts 28. Gamett  
Advanced work in upholstery.
- 130. Pattern Making and Foundry Practice.** (2) W. Two two-hour periods per week. Prerequisite: Industrial Arts 30. Staff  
Principles of pattern making taught through wood patterns and sand castings of machine parts.
- 145. Electricity.** (4) W. Two lectures and one laboratory period per week. Staff  
Fundamentals of electricity, practical electrical wiring, including DC and AC circuits and principles of motors and generators.
- 160. Shop Planning and Organization.** (3) S. Gamett  
Planning and organizing the physical plant for different types of school shops. Required of all teaching majors and minors.
- 161. Principles and Objectives of Industrial Arts Education.** (3) S. Gamett  
General philosophy and purposes of industrial education; its principles and objectives.
- 162. Methods of Teaching Industrial Arts.** (3) A. Gamett  
Techniques and methods applied to individual and group instruction.
- 170. Standard Construction Methods.** (3) A. Snell  
This course deals with the theoretical aspects of building, location, soil conditions, footings, material, and equipment.
- 171. Estimating.** (3) W. Prerequisite: Drawing 44. Snell  
Interpreting plans and specifications. Methods of estimating and figuring costs of materials and labor.

## Drawing

### Lower Division Courses

- 4. Blue Print Reading.** (2) A. Snell  
A fundamental course in blue print reading. This course covers the instruction necessary to understand the purposes of, and the relation between, specifications and drawings as used in industry.

9. **Elementary Machine Design.** (2) S. Two two-hour drawing periods per week. Prerequisite: Drawing 46. Snell  
Machine fastenings, technical sketching, working drawings, detailings, jigs, and fixtures.
40. **Theory and Practice of Design.** (2) A.W.S. (See Art 10.) Staff
42. **Free-hand Lettering.** (2) A.W.S. Two two-hour periods per week. Snell  
Practice in lettering as applied in engineering and architectural drawing.
43. **Elementary Drawing.** (2 or 3) A.W.S. One lecture and two or three two-hour drawing periods per week. Staff  
The care and use of instruments, lettering, applied geometry, and orthographic projection. A beginning course for students interested in drawing.
44. **Architectural Drawing.** (2 or 3) A.W.S. One lecture and two or three two-hour drawing periods per week. Prerequisite: Drawing 43 or equivalent. Snell  
Drawing of architectural details of footings, walls, doors, windows, cornices, etc.
45. **Architectural Drawing.** (2 or 3) A.W.S. One lecture and two or three two-hour drawing periods per week. Prerequisite: Drawing 44 or equivalent. Snell  
Small house plans, elevations, sections, and details.
46. **Descriptive Geometry.** (3) S. One lecture, three two-hour drawing periods per week. Prerequisite: Drawing 43 or equivalent. Snell  
Principles relating to point, line, plane, cylinder, cone, and double curved surfaces, etc., with application to practical problems. Required of architectural students and industrial arts majors, excepting teaching majors, and minors in drawing.
47. **Instrumental Perspective.** (2) A. Two two-hour drawing periods per week. Prerequisites: Drawing 4 or 43. Snell  
The theory and application of methods of drawing architectural perspectives.
48. **Shades and Shadows.** (2) W. Two two-hour drawing periods per week. Prerequisite: Drawing 47. Snell
49. **Rendering.** (2) Two two-hour drawing periods per week. Prerequisite: Drawing 48. Snell  
Wash rendering practice plates and rendering of architectural elements.

#### Upper Division Courses

- 140, 141, 142. **Architectural Design.** (2 or 3 - 2 or 3 - 2 or 3) Two or three two-hour drawing periods per week. Prerequisites: Drawing 44, 45, or equivalent. Snell

Original design by the student. Problem to be passed upon by instructor. Complete set of plans with one display drawing of problem chosen.

- 150. Topographical Drawing.** (3) S. Two two-hour drawing periods per week. Prerequisite: Drawing 43 or equivalent. Snell  
Topographical symbols, mapping, and plotting.

## Italian

(See courses in Modern and Classical Languages.)

## Japanese

(See courses in Modern and Classical Languages.)

## Journalism

Professor: W. Hales.

Associate Professors: O. R. Smith (chairman, 160 SSC), Grow  
W. J. Taylor.

Assistant Professors: Butterworth, Ludlow, Tyndall.

Instructors: Boel, Haymore.

A student who elects to major in Journalism will pursue one of the specialization sequences listed below.

**I. Editorial Journalism:** minimum of 40 credit hours in Journalism including courses 61, 62, 105, 106, 107, 161, 162, 171, 172, 179, 185, 186. Recommended electives are 26, 121, 139, 175, 177, 181, 188, and 189. (The "elective" group contains a number of courses of special value to those planning to work on smaller newspapers.)

### Typical Schedule of Journalism Courses

1st Year	2nd Year	3rd Year	4th Year
1 (2)	61 (3)	105 (5)	106 (3)
2 (2)	62 (3)	107 (3)	171, 172 (4)
26 (4)		161, 162 (4)	179 (2-4)
		185, 186 (6)	

**II. Radio-Television Journalism:** minimum of 36 credit hours in Journalism, including courses 41, 61, 106 and 107, and 12 hours selected from the following: courses 127, 141, 146, 147, 148, 149, 150, 157, 158, 159, 192. Students who wish to specialize in news should elect course 62; students who specialize in advertising should elect course 139. Recommended electives for either specialization are courses 1, 2, and 26.

Related courses in other departments recommended for radio-television majors are Physics 2; Speech 1, 51, 52, 155, 157, 158, 159.

### Typical Schedule of Journalism Courses

1st Year	2nd Year	3rd Year	4th Year
1 (2)	41 (3)	107 (3)	149 (5)
2 (2)	61 (3)	141 (3)	150 (5)
		146, 147 (4)	106 (3)

**III. Public Relations and Industrial Journalism:** minimum of 30 credit hours in Journalism including courses 61, 106, 118, 135, 139, 180, 193. Recommended electives are courses 1, 2, 62, 105, 115, 179.

The student should select a composite minor of 25 or more hours from at least three of the following course groups: Business Management 35, 106, 120, 163; Economics 1, 161, 176; Psychology 11, 145, 164, 165, 167; Sociology 11, 114, 141, 142.

### Typical Schedule of Journalism Courses

1st Year	2nd Year	3rd Year	4th Year
1 (2)	61 (3)	106 (3)	139 (5)
2 (2)	62 (3)	118 (3)	180 (3)
		135 (3)	193 (2)

**IV. Teaching Major.** Students who plan to teach journalism in secondary schools should take the following courses in Journalism: 61, 62, 105, 106, 161, 162, 171, 172, 185, 186, and eight or more hours selected from courses 1, 2, 26, 121, 179, and 268. Journalism is one of the subjects comprising the composite major in Language Arts designed for prospective teachers. Appropriate teacher education courses are prescribed by the Department of Secondary Education.

The above sequences may be altered to allow for previous experience or individual needs upon permission of the head of the department. For highly qualified students special programs of study may be outlined in advertising, photo journalism, or community journalism.

**Other Requirements.** It is recommended that students who major in Journalism complete the American History and Government requirement of the university by taking Political Science 10 and either History 21 or History 74. History 70 should not be taken.

Journalism majors are also advised to obtain as broad a background as possible in the social sciences, and at least 9 hours in English in addition to freshman English. Two years in foreign language are recommended.

Majors must have ability to operate a typewriter.

The following are suggested as minors for students who major in Journalism: Business Management, Economics, English, History, Marketing, Political Science, Psychology, Sociology, and Speech.

### Lower Division Courses

#### 1. Introduction to Journalism. (2) A. Butterworth

An introduction to the social, cultural, and practical aspects of journalism. Emphasis is given to the viewpoint of the layman as a "consumer" of journalism. The course surveys the history, reading values, origins, meanings, and processing of news.

#### 2. Introduction to Journalism. (2) W. Butterworth

Survey of additional media of journalism, including radio, television, the magazine, and the relationship of advertising to the mass media. Emphasis on social, cultural and vocational aspects. (This course may be taken without Journalism 1.)

- 26. Photography.** (4) A.S. Three lectures and one three-hour laboratory period per week. W. Hales  
Lectures on the theory and art of photography; laboratory exercises in photographic manipulation, determination of the characteristics of photographic materials. (See Physics 26.)
- 41. Introduction to Radio and Television Broadcasting.** (3) Ludlow  
A.W.S.  
Scope, influence, current practice, problems and social implications of the American system of radio and television broadcasting; microphone practice and experience. Two-hour laboratory. (See Speech 41).
- 61. News Writing.** (3) A.S. Prerequisite: English 3 or 13. One lecture and two two-hour laboratory periods per week. Staff  
Newspaper style and the elements of news; practice in gathering and writing news stories. Use of typewriter is required.
- 62. Reporting.** (3) W. Prerequisite: Journalism 61. One lecture and two two-hour laboratory periods per week. Staff  
Study of reporting and news gathering techniques; practice in handling special reporting assignments such as sports, society, politics, conventions, and police news.

### Upper Division Courses

- 105. History of Mass Communications.** (5) W. Smith  
Development of American journalism from its colonial beginnings to the present, portraying the press in relation to the political, social, and economic history of the times. Special attention will be given to the establishment and growth of newspapers in the West. Emergence of the newer media.
- 106. Practices and Problems in Mass Communications.** (3) W. Staff  
The role of mass communication in American life; ideals and deficiencies of the newspaper, radio, and other media, with emphasis on obligations to the community.
- 107. Law of Mass Communications.** (3) A. Butterworth  
Study of legal limits and privileges of the press and radio; libel, contempt, privileged documents and sources, copyright, right of privacy. Problems in avoiding criminal and civil liabilities.
- 111. Magazine Article WWriting.** (3) S. Butterworth  
Study of non-fiction articles for general magazines, specialized publications, and newspaper sections; assignments in planning and writing articles. Criticism, analysis of manuscript markets, and help in selling articles written in the course.

- 115. Public Opinion and Propaganda.** (3) W. Grow  
Trends of public opinion and the techniques which have been instrumental in shaping it. (See Political Science 115.)
- 118. Public Opinion Polls and Surveys.** (3) A. Smith  
A study of survey methods in opinion and attitude research: construction of questionnaires; large-scale sampling; procedures in telephone, mail, and personal interview surveys; evaluation of survey data. The development of opinion polls in the United States. Application of survey techniques in a field project.
- 120. Religious Journalism.** (2) S. Butterworth  
The application of journalistic principles to the advancement of religion. History of religious journalism, principles of news writing, public relations, promotion and publicity for church and mission activities.
- 121. Press Photography.** (4) W. Two lectures and two three-hour laboratory periods per week. Prerequisite: Journalism 26.  
Boel  
Lectures on the principles of photography for newspapers and periodicals, and laboratory exercises in the use of photographic equipment for the taking and developing of news pictures.
- 122, 123, 124. Press Photography Workshop.** (1-1-1) A.W.S.  
Prerequisites: Journalism 61, 121, and permission of instructor.  
Boel  
Individual projects requiring the completion of photographic assignments for campus and commercial publications; weekly conferences with instructor on special problems in press photography.
- 127. Motion Picture Photography.** (3) A.S. Prerequisite: one of the following courses or equivalent—Journalism 26, Speech 51, Education 175.  
Tyndall, et. al.  
Principles of motion picture photography in educational, recreational, and professional applications; practice in use of the motion picture camera for indoor and outdoor subjects; script preparation, film editing, titling, sound recording, and special effects. (See Instruction 177.)
- 130. Newspaper Advertising.** (2) A. Staff  
Organization and operation of the advertising department of the newspaper. Rates, procedures, and promotion for display and classified advertising.
- 131, 132, 133. Advertising Sales and Promotion.** (2-2-2) A.W.S.  
Staff  
Preparation of copy and layouts, and sale of local advertising in the campus newspaper. Conferences with the instructor on advertising sales promotion and practical field work in servicing local retail advertising accounts.

- 135. Public Relations.** (3) S. Smith  
 The philosophy and practice of public relations as related to industrial, business, educational, governmental, and other institutions. Study of various public and communication media, and selection and use of effective tools in public relations programs. (See also Business Management 135.)
- 139. Advertising.** (5) A.S. Recommended: Psychology 165. Taylor  
 Principles of advertising, including copy preparation, layout, media, campaigns. (See Marketing 159.)
- 141. Radio News Writing.** (3) A. Prerequisite: Journalism 61. Staff  
 One lecture and two laboratory periods per week.  
 Radio news style, types, and sources; practice in writing and editing news copy for broadcast purposes. (See also Speech 141.)
- 146, 147, 148. Radio News Workshop.** (2-2-2) A.W.S. Prerequisites: Journalism 141 and permission of instructor. Staff  
 Practical experience in gathering and writing local news and rewriting wire news for radio broadcast. Conferences on radio news problems.
- 149. Radio and Television Advertising.** (5) W. Staff  
 Business and advertising principles of radio and television. Survey of the entire commercial background of broadcasting.
- 150. Commercial and Continuity Writing for Radio and Television.** (5) S. Staff  
 A study of all forms of commercial radio and television writing, including spot announcements, participating announcements, program commercial copy, program tie-ins, musical program continuity, and talks program continuity.
- 157, 158, 159. Radio Newsroom Operation.** (1-1-1) A.W.S. Prerequisites: Journalism 147 and permission of instructor. Staff  
 Supervised work in directing the news operation of the campus radio station. Conferences on problems of news broadcasting.
- 161, 162. Reporting Workshop.** (2-2) A.W.S. Prerequisite: Journalism 62. Staff  
 Supervised work in regular staff positions on the campus newspaper, involving the writing of news and feature copy. Conferences with the instructor on problems of news-gathering and news-writing.
- 171, 172. Advanced Reporting and Editing Workshop.** (2-2) A.W.S. Prerequisites: Journalism 162 and 185. Staff  
 Practical experience in responsible positions on the campus newspaper. Conferences with the instructor on editing, makeup, and management problems.



- 175. Typography and Printing Processes.** (2) W. One lecture and one laboratory period per week. Haymore  
Study of type styles and sizes, mechanical equipment, letterpress and offset printing, engraving processes and technical aspects of publishing; laboratory practice in printing methods.
- 177. Printing Workshop.** (Arr.) A.W.S. Prerequisites: Journalism 175 and permission of instructor. Haymore  
Supervised practice in the mechanical processes of printing, including typesetting, page makeup, and presswork.
- 179. City Room Staff.** (2-4) A.W.S. Prerequisites: Journalism 62 and approval of instructor. Staff  
An internship course designed to give experience in gathering and writing news under actual newspaper office conditions. With supervision from staff members of the daily press, students will gather, write, and edit news from regular beats for a minimum of 30 hours per credit.
- 180. Industrial Magazine Editing.** (3) S. Staff  
Principles and techniques of layout and design as related to the editing of magazines and special booklets. Study of formats, titles, engraving, color utilization, and printing processes. Emphasis will be given to gathering and processing material for employee magazines.
- 181. Editorials and the Editorial Page.** (3) W. Butterworth  
Study of the editorial and practice in writing it; the editorial page, its policies and makeup.
- 185. News Editing.** (3) A. Prerequisite: Journalism 61. Two lectures and one laboratory period per week. Staff  
Copyreading, proofreading, and headline writing. Actual copy desk problems and practice.
- 186. Editing and Makeup.** (3) W. Prerequisite: Journalism 185. Two lectures and one laboratory period per week. Staff  
Editing of both telegraph copy and local copy for building of newspaper pages. Theory and practice of makeup. Special problems in handling election news, use of pictures, sectional stories, and special editions.
- 188. The Community Newspaper.** (3) (Not given this year.) Prerequisite: Journalism 185.  
The country or neighborhood weekly and its place in community life; editing and business problems. Conferences are arranged with editors of weekly papers.
- 189. Community Newspaper Workshop.** (2-4) A.W.S. Prerequisite: Approval of instructor. Staff  
An internship course under supervision of the editor of a weekly newspaper in the vicinity of Provo, giving practical experience in reporting, editing, and management functions for a minimum of 30 hours per credit.
- 191. Special Projects in Editorial Journalism.** (Arr.) A.W.S. Prerequisite: Permission of instructor. Staff

192. **Special Projects in Radio Journalism.** (Arr.) A.W.S. Pre-requisite: Permission of instructor. Staff
193. **Special Projects in Public Relations.** (Arr.) A.W.S. Prerequisite: Permission of instructor. Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

241. **Research Methods in Mass Communications.** (3) A. Smith, Ludlow
242. **Mass Communications and Society.** (4) S. Smith, Ludlow
250. **Seminar in Mass Communications.** (Arr.) A.W.S. Staff
268. **Teaching Journalism in the Secondary Schools.** (3) (Not given this year.) Smith  
This course will be taught only during the summer. (See Instruction 233.)
- 291, 292, 293. **Special Studies in Journalism** (Arr.) A.W.S. Smith
294. **Readings in Mass Communications.** (Arr.) A.W.S. Staff
300. **Thesis for Master's Degree.** Staff

### L.D.S. Church Organization and Administration

(See courses in Religion.)

### Landscape Architecture

(See courses in Horticulture and Horticultural Specialties.)

### Latin

(See courses in Modern and Classical Languages and in Religion.)

## Library Science

Director of Libraries: Tyler (330L).

Librarian: N. Rich (218L).

Reference Librarian: Knight; Assistant, R. Hansen.

Science Librarian: Chandler.

Periodicals Librarian: Purdy.

Instructors: Brace, G. D. Jenson.

The library science program is organized to fill the needs of school and public libraries, teachers, students who wish to become familiar with library use, and those who wish to do advance study in a professional library school. All of the following courses will be taught one or more times during a two-year period, including summer sessions.

### Lower Division Courses

#### 11. Use of Books and Libraries. (2) A.W.S.

The efficient use of library materials; the card catalog; use of general reference books (bibliographies, dictionaries, encyclopedias, and indexes); and making of bibliographies. (Recommended for all students, but especially for those who plan to minor in Library Science.)

### Upper Division Courses

#### 150. Classification. (3) W.

Devoted to the theory and principles governing the classification of books according to the Dewey Decimal system. Practical problems in classifying books. (No one will be permitted to take this course without registering for 151.)

#### 151. Cataloging. (3) W.

An elementary course in cataloging of books. Catalog entries, author, subject and title. Laboratory period cataloging materials suitable for school and public libraries. Ability to use the typewriter is required.

#### 163. Library Science for Teachers and Administrators. (3) A.

Emphasizes general organization and use of the school library, with units on aids for book selection and use of reference books. These courses will fill certification requirements for school librarians.

#### 165. Selection and Use of Library Materials for the Elementary Schools. (3) W.

Library Service in the elementary school will be considered, especially as it concerns selection, acquisition, and use of library materials—books, periodicals, pictures, etc. Units on story selling and library instruction for elementary school pupils will be included.

- 167. Selection and Use of Library Materials for the Secondary School.** (3) S.

- 168. Children's Literature.** (5) A.W.S.

(See Elementary Instruction 110.)

This course is planned to provide a general survey of books and literature for young people including reading references, book selection, and book reviewing. Selection and use of periodicals and of other library materials as they relate to the curriculum will be considered.

- 170. Introduction to Bibliography.** (3) S.

An intensive study of the content and use of general reference books such as encyclopedias, dictionaries, periodical indexes, yearbooks, directories, bibliographies, handbooks, atlases, and biography sources. Bibliographic form will be stressed and the reference department will serve as a laboratory.

### Graduate Courses

- 250. Problems in Acquisition and Organization of Library Materials.** (3) (Not given this year.) Staff
- 263. Modern Library Practices.** (3) (Not given this year.) Staff
- 271. Bibliography of the Sciences.** (3) (Not given this year.) Staff
- 272. Bibliography of the Humanities.** (3) (Not given this year.) Staff
- 273. Bibliography of the Social Sciences.** (3) (Not given this year.) Staff
- 290. History of Books and Development of Libraries in Our Civilization.** (3) (Not given this year.) Staff

### Linguistics

(See courses in Modern and Classical Languages.)

### Management

(See courses in Business Management.)

## Marketing

Professors: Boyle, E. M. Jenson, B. F. Larsen, R. L. Smith.

Associate Professors: W. J. Taylor (chairman, 150 N), Corbridge, Nelson.

Assistant Professors: M. S. Potter\*, Shumway\*, Stewart\*, Tuttle.

Instructors: Davies, Jorgensen, Prestwich.

The marketing course is designed to prepare students for positions of management and executive responsibility in the fields of retailing, wholesaling, advertising, selling, sales management, industrial marketing, and market research.

The effective management of the dynamic forces affecting the modern business firm requires training and experience in appraising facts affecting business situations, and the organizing and expressing of such facts in sound business decisions and policies. Also, today's business leader must appreciate the importance of human relations in business dealings, both inside and outside the firm.

The marketing course provides this training and experience by a three-point program: First, the course provides the student with the tools and knowledge with which to work and to understand the business environment. Second, he is assigned actual business problems and defends his decisions in oral and written reports. Third, classes are arranged to bring the student in working contact with business executives of the community; research projects and case problems develop from these contacts, as well as an ability on the part of the student to communicate effectively with men on the executive level. Also, as a part of this program, business leaders from all parts of the nation are brought to the campus to lecture and to confer with the students.

In order that all students who plan to be graduated with a major in one of the five departments of Accounting, Business Management, Economics, Finance and Banking, and Marketing may have a common background of basic information and tools to facilitate their advanced work, they are required to take the core courses listed below. These courses form a basic training normally to be completed during the first two years of college work and before the student is admitted to a major department. Students in the College of Commerce will be counseled during this program by members of the staff selected by the office of the Dean of the College of Commerce.

Accounting 1 and 2	10 hours
Business Management 35	5 hours
Business Management 75	5 hours
Economics 1	5 hours
Psychology 11 or substitute approved by counselor	5 hours

The courses in Economics and Psychology listed above apply toward the University general education requirement in social science. In addition to the above courses, it is recommended that many students in these departments will be able to fill the American History and Government requirement best by taking Economics 74 and Political Science 10.

In addition to the above courses, students majoring in this department are required to take Marketing 107, 108, 151, 157, 158 or 165, 159, 170, and 171; Economics 145; Business Management 120, 130; Finance and Banking 151, 154; Psychology 165.

The following courses are recommended: Economics 74, 156, 167; Finance and Banking 152, 153, 155, 254.

### Lower Division Courses

- 10. Theory and Practice of Design.** (2) A.W.S. Stewart, Staff  
(See Art 10.)
- 23. Geography of Economic Products.** (3) S. Tuttle  
(See Geography 23.)
- 39, 40. Commercial Art.** (2) A.W.S. Jenson, Stewart  
(See Art 39, 40)
- 55. Textiles.** (3) A.W.S. Potter  
(See Clothing and Textiles 60.)

### Upper Division Courses

- 107. Principles of Marketing.** (5) A.W.S. Staff  
Deals with the problem of getting commodities from the point of production to the ultimate consumer. It includes a study of the management problems of the institutions involved, such as retailers, wholesalers, brokers, etc. It also treats in an analytical manner the functions performed by the institutions, such as buying, selling, market research, etc.
- 108. Principles of Personal Selling.** (5) A.W.S. Taylor  
This course treats selling in a broader sense than is usually implied in selling a product or a service. Problems presented in the course will provide students with the opportunity of analyzing the human factors and the motivations involved in business dealings. Emphasis will be given to the solution of problems, to procedures involved in selling to various types of customers, and to dealing with associates in an administrative program.
- 140. Lettering.** (2) A.W. Stewart  
Skills and letter structure for lettering reproduced for printed page. (See Art 140.)
- 141. Layout.** (2) S. Prerequisite: Art 140. Stewart  
(See Art 141.)

- 3 151. **Economics of Consumption.** (3) A.W. Prestwich, Boyle  
This course discusses the market from the point of view of its strengths and weaknesses in providing the consumer with maximum utility and satisfaction. The consumer point of view is stressed throughout.
152. **Radio Advertising.** (5) W. Staff  
(See Journalism 149.)
156. **Transportation Problems.** (5) W. Davies  
(See Economics 156.)
157. **Problems in Marketing.** (5) W.S. Prerequisites: Marketing 107; Business Management 106 and 120. Prestwich, Taylor  
This course introduces the student to the marketing program which brings him in contact with business cases and business executives. By the use of the case method, the student analyzes marketing management problems from the perspectives of the manufacturer, the wholesaler, the retailer, and financier and integrates all of these views into the focus of business decisions and policies.
158. **Retail Store Management.** (5) A.W. Prerequisite: Marketing 107. Staff  
Problems are given to the student which provide him with the opportunity of analyzing such subjects as store organization; financing; personnel; store operation; and the buying, selling, and pricing of merchandise. He is provided with frequent conference opportunities with business executives in processing these business problems into practical decisions and policies.
- 5 159. **Advertising.** (5) W. Taylor, Staff  
The subject of advertising is dealt with in a comprehensive manner. Specifically, the course directs study to the different levels of selling and considers the respective advertising problems. The fundamentals of good copy, visualization, layout, technical problems of production, and the planning and execution of the complete campaign, including advertising research and testing, are given analytical emphasis. (See Journalism 139.)
162. **Economics of Clothing Selection.** (2) W. Prerequisite: Clothing and Textiles 55. Jorgensen  
(See Clothing and Textiles 170.)
163. **Personnel Management.** (5) A.S. R. L. Smith  
(See Business Management 163.)
165. **Sales Management.** (5) A.S. Boyle  
Deals in problems about the methods of selecting, training, and paying salesmen; the technique of making area quota surveys; and the sales planning necessary to fit a sales organization to the market most efficiently. The principles of managing a sales force are also treated.

- 168. Cooperative Marketing.** (3) A. Corbridge  
History, principles, forms, problems, organization, and operation of agricultural cooperatives, indicating the advantages and disadvantages of the cooperative marketing institution in our economy.
- 169. Marketing Livestock Products.** (3) W. Nelson  
(See Agricultural Economics 169.)
- 170, 171. Lectures in Executive Policy.** (1) S. Taylor  
Successful businessmen from the various fields of business will discuss the challenges, opportunities and significant developments in their respective fields.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only graduate credit**. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

- 204. Research in Marketing Problems.** (Arr.) A.W.S. Prerequisite: 107. Staff
- 205. Special Problems in Retailing.** (Arr.) A.W.S. Prerequisite: 158. Staff
- 206. Special Problems in Marketing and Marketing Analysis.** (Arr.) A.W.S. Prerequisites: Marketing 107; Business Management 106. Staff
- 285. Research in Marketing.** (3) A.W.S. Prerequisites: Marketing 107 and Business Management 106. Staff
- 300. Thesis for Master's Degree.** Staff



## Mathematics

Professors: Marshall (chairman, 281 PS), W. Hales.

Associate Professors: Eastmond, J. H. Gardner\*.

Assistant Professors: H. Jr. Fletcher, Geertsens, R. Hales, Hoyt, Miller.

Instructors: Dean\*, Haupt.

Students who major in mathematics have one of the following course sequences prescribed: Mathematics 11, 12, 13, 91, 92, 93, 111, 112, 113, or 15, 16, 17, 98, 99, 100, 113. In addition to either sequence a student must present one of the following groups of three courses: 121, 122, 123 or 131, 132, 133 or 191, 192, 193.

Mathematics 1, 35, and 152s may not be included in the major or minor requirements.

Mathematics is one of the subjects comprising the composite major in mathematics and the physical sciences designed for prospective teachers.

It is expected that a student intending to major in Mathematics shall have met the general entrance requirements of the College of Physical and Engineering Sciences as stated on page 405 of this catalog.

### Lower Division Courses

1. **Algebra.** (5) A.W.S. Prerequisite: One year of high school algebra and one year of plane geometry. A student may not elect this course for credit if he has had credit in high school for one and one-half or more units of algebra. Staff
3. **Solid Geometry.** (3) S. Prerequisites: Mathematics 1 or its equivalent and plane geometry.
11. **College Algebra.** (5) A.W.S. Prerequisite: Mathematics 1 or its equivalent. Staff
12. **Plane Trigonometry.** (5) A.W.S. Prerequisite: Mathematics 1 or its equivalent. Staff
13. **Analytic Geometry.** (5) S. Prerequisites: Mathematics 11 and 12. Staff  
A study of rectangular coordinates, straight line, circle, parabola, ellipse, hyperbola, transfer of coordinates, etc.
- 15, 16, 17. **Analytic Geometry and Calculus.** (5-5-5) A.W.S. Admission only by permission of instructor. Staff

The analytic geometry of the straight line and circle, the differential calculus of algebraic functions with applications, an introduction to integration, the analytic geometry of conic sections, a brief treatment of theoretical trigonometry, the differential calculus of trigonometric, logarithmic, and exponential functions. A knowledge of numerical trigonometry is desirable though not necessary.

35. **Mathematics of Business.** (3) W. Prerequisites: Mathematics 1 or equivalent. Hoyt

Application of algebra to general business problems such as annuities, amortization, capitalization, depreciation, sinking fund, bond values, and building and loan associations.

- 91, 92, 93. **Differential and Integral Calculus.** (4-4-4) A.W.S. Prerequisite: Mathematics 13. Staff

The processes of differentiation and integration are developed and applied to problems in geometry, mechanics, and physics.

- 98, 99. **Calculus and Differential Equations.** (5-5) A.W. Prerequisite: Mathematics 15, 16, 17. Marshall

A systematic treatment of integration, application of the definite integral to topics in mathematics and physics, convergence of infinite series, expansion in Taylor's series, introduction to partial differentiation and multiple integration.

#### Upper Division Courses

100. **Differential Equations.** (5) S. Prerequisite: Mathematics 98 or 99. Marshall

Study of ordinary differential equations with applications.

- 105, 106, 107. **Engineering Mathematics.** (3-3-3) A.W.S. Prerequisites: Mathematics 93 or 99. Fletcher

Differential equations, fourier series, complex variables, LaPlace transform, vector analysis, and partial differential equations.

- 111, 112. **Differential Equations.** (3-3) A.W. Prerequisite: Mathematics 91, 92, 93 or 98, 99, 100. Marshall

Differential equations of the first order, linear differential equations, total and partial differential equations with numerous applications to physics. Junior or senior year.

113. **Applied Mathematics.** (3) S. Prerequisite: Mathematics 112. Marshall

Advanced mathematics for students of physics and engineering with emphasis on Vector Analysis.

- 121, 122, 123. **Theoretical Mechanics.** (4-4-4) A.W.S. Prerequisites: Mathematics 91, 92, 93 or 98, 99, 100; Physics 41, 42, 43. Gardner

Fundamental principles of mechanics and their applications to physical problems.

131. **Theory of Equations.** (3) A. Prerequisites: Mathematics 93 or 99. Fletcher

Elementary properties of equations, location of roots of equations, elimination, substitute groups, etc.

132. **Introduction to Higher Algebra.** (3) W. Fletcher

This course deals with elementary properties of integers and rational, real, and complex numbers; the basic theory of polynomials and groups; and the algebraic properties of n-dimensional vector spaces.

- 133. Introduction to Higher Algebra.** (3) Staff  
Topics covered include linear transformations and matrix theory, applications to simultaneous linear equations, eigenvectors and eigenvalues, and the reduction of quadratic forms.
- 152s. Elementary Statistics.** (5) A.W.S. Staff  
Graphic and tabular presentation, measures of central tendency, variability, probability, Chi-square, null hypothesis, linear correlation. (This course does not count towards a major or minor in Mathematics.) (See Education: Research and Psychological Services 115.)
- 191, 192, 193. Advanced Calculus.** (3-3-3) A.W.S. Gardner

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry only graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

- 201, 202, 203. Theory of Functions of a Real Variable.** (2-2-2) A.W.S. (Not given this year.) Staff
- 211, 212, 213. Partial Differential Equations.** (3-3-3) A.W.S. Staff
- 221, 222, 223. Methods in Mathematical Physics.** (3-3-3) A.W.S. (Not given this year.) Gardner
- 231, 232, 233. Functions of a Complex Variable.** (2-2-2) A.W.S. Marshall
- 292, 293, 294. Readings in Mathematics.** (1-3) A.W.S.  
Marshall, W. Hales, Eastmond,  
Gardner, R. Hales, Fletcher
- 300. Thesis for Master's Degree.**

## Mechanical Engineering Science

(See courses in Engineering Sciences.)

## Medical Technology

(See College of Biological and Agricultural Sciences.)

## Modern and Classical Languages

Professors: Barker, Cummings (emeritus), deJong, Lee\*, Nibley, Sperry.

Associate Professors: Watkins (chairman, 326 McK), Rogers.

Assistant Professors: J. R. Clark III, H. D. Taylor\*, Valentine\*, Wilkins.

Instructors: Gibson, Gubler, Rasmussen.

Supervisor of Language Laboratory: Gibson.

Every degree of Bachelor of Arts and Master of Arts granted by the University requires the completion of the equivalent of at least 24 hours of an approved foreign language.

For students who have had the opportunity to study a foreign language in their high school career, the 24-hour language requirement for the A.B. degree may be proportionately reduced for each unit of high school work completed. Students who have had one year of secondary school language work will be placed in the second quarter of the language. Those with two years of high school work will register for the third quarter, unless they are given permission by the department to register for second year college work. Students with three years of high school work will be permitted to register for the first quarter of second-year college work.

Students who have had foreign residence may, with the consent of the department, obtain up to 24 hours of special foreign language credit. This may be done in two ways: (1) by successfully completing a more advanced course in the language; (2) by passing a series of examinations administered by the language department.

In French, Italian, Portuguese, Spanish, German, Latin, Greek, Hebrew, and Russian, the department offers programs leading to a University and departmental major or minor with the Bachelor of Arts degree. The requirement for a major is 30 hours of upper division credit. The requirement for a minor is 20 hours of upper division credit.

The department reserves the right to specify certain courses to be used toward a degree in these foreign languages. Areas that serve as minors include a second foreign language, English, one of the fine arts, history, political science, sociology, etc.

The department has one of the most modern and best equipped language laboratories in the United States. All presently available electronic recording and playback equipment is at the disposal of more than 60 students every hour, permitting a strong emphasis to be placed on the acquiring of a good pronunciation. The tape library contains some of the best dramatic and poetic works in the world's chief languages.

Prospective graduate students are reminded that a second, and sometimes a third, language will be required of them in graduate school. It is advisable that work in at least one other language be started before the junior year. Graduate students who have the consent of the instructor may register for certain undergradutae literature courses.

## MODERN LANGUAGES

### French

#### Lower Division Courses

- 1, 2, 3. First Year French.** (5-5-5) A.W.S. (GER-HA)  
Cummings, Clark, Staff

Designed for those who have had no French. Pronunciation, reading, the fundamentals of grammar, and the building of a substantial vocabulary.

#### Upper Division Courses

- 101, 103, 105. Second Year French Reading and Conversation**  
(3-3-3) A.W.S. Prerequisite: French 3, or three units of French in high school, or consent of instructor. Must be taken with 102, 104, 106. Cummings, Clark
- 102, 104, 106. Second Year French Conversation and Grammar**  
(2-2-2) A.W.S. Prerequisite: French 3, or three units of French in high school. Must be taken with 101, 103, 105. Cummings, Clark
- 107, 108, 109. Individual Study in French.** (1-3, 1-3, 1-3) A.W.S. Prerequisite: 15 hours of French and the consent of the instructor. Staff  
Assignments are made to fit the individual needs of students.
- 111, 112, 113. Masterpieces of French Literature.** (3-3-3) A.W.S. (†GER-HA) Prerequisites: French 105 and 106 or consent of instructor. Cummings, Clark
- 115, 116, 117. Gospel in French.** (2-2-2) A.W.S. Prerequisite: 25 hours of French or the consent of the instructor. Clark  
Discussions of the gospel message and the reading of scripture in French. The aim of this course is to give the student practice in conversation and to widen his knowledge of the Gospel. (See Church Administration 125, 126, 127.)
- 121, 122, 123. French Composition and Conversation.** (3-3-3) A.W.S. Prerequisite: 25 hours of French or the equivalent. Cummings
- 131, 132, 133. Introduction to French Literature and Culture.** (3-3-3) A.W.S. (†GER-HA) Prerequisite: 30 hours of French or the consent of the instructor. Clark  
A general view of the literary periods, movements, and social background, with representative readings.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

201. French Composition and Conversation. (3) S.	Clark
231. Old French Literature. (3) W.	Clark
233. French Literature of the Renaissance. (3) S.	Clark
234. French Literature of the 17th Century. (3) A.	Cummings
235. French Literature of the 18th Century. (3) W.	Cummings
237. French Literature of the 20th Century. (3) W.	Cummings
241. Moliere. (3) W.	Clark
251. French Drama of the 19th Century. (3) S.	Cummings
252. Modern French Drama. (3) W.	Clark
253. French Novel of the 19th Century. (3) S.	Clark
254. Modern French Novel. (3) A.	Cummings
261. Introduction to French Civilization. (3) A.	Cummings
291, 292, 293. French Seminar. (1-1-1) A.W.S.	Cummings, Clark
300. Thesis for Master's Degree.	Staff

### German

#### Lower Division Courses

- 1, 2, 3. First Year German. (5-5-5) A.W.S. (GER-HA) Rogers  
Watkins, Gubler, Staff

Designed for those who have not had German. Pronunciation, reading, fundamentals of grammar, practice in conversation, and the building of a substantial vocabulary.

#### Upper Division Courses

- 101, 103, 105. Second Year German Reading and Conversation. (3-3-3) A.W.S. Prerequisite: German 3, or three units of German in high school, or consent of instructor. Must be taken with 102, 104, 106. Rogers, Watkins, Gubler
- 102, 104, 106. Second Year German Conversation and Grammar. (2-2-2) A.W.S. Prerequisite: German 3, or three units of German in high school, or consent of instructor. Must be taken with 101, 103, 105. Rogers, Watkins, Gubler

- 107, 108, 109. Individual Study in German.** (1-3, 1-3, 1-3) A. W.S. Prerequisites: 15 hours of German and consent of the instructor. Staff  
Assignments are made to fit the individual needs of the student.
- 111, 112, 113. Masterpieces of German Literature.** (3-3-3) A.W.S. (†GER-HA) Prerequisites: German 105 and 106, or consent of instructor. Rogers, Watkins, Gubler
- 115, 116, 117. Gospel in German.** (2-2-2) A.W.S. Prerequisite: 15 hours of German or the consent of the instructor. Watkins  
Discussions of the gospel message and the reading of scripture in German. The aim of this course is to give the student practice in conversation and to widen his knowledge of the Gospel. (See Church Administration 131, 132, 133.)
- 121, 122, 123. German Composition and Conversation.** (3-3-3) A.W.S. Prerequisite: 25 hours of German or the equivalent. Watkins
- 131, 132, 133. Introduction to German Literature and Culture.** (3-3-3) (Not given this year.) (†GER-HA) Prerequisite: 30 hours of German or the consent of the instructor. Rogers  
Watkins  
A general view of literary periods, movements, and social background, with representative readings.
- 167, 168, 169. Scientific German.** (3-3-3) (Not given this year.) Gubler

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- |   |         |
|---|---------|
| <b>201. German Composition and Conversation.</b> (3) A. | Watkins |
| <b>237. Contemporary German Literature.</b> (3) A.      | Rogers  |
| <b>241. Lessing.</b> (3) A.                             | de Jong |
| <b>242. Schiller.</b> (3) W.                            | de Jong |
| <b>243. Goethe.</b> (3) S.                              | de Jong |
| <b>251. The German Drama.</b> (3) A.                    | Rogers  |
| <b>254. The German Novel.</b> (3) W.                    | Rogers  |
| <b>256. The German Novelle.</b> (3) S.                  | Rogers  |
| <b>258. German Lyric Poetry.</b> (3) W.                 | de Jong |

- |   |         |
|---|---------|
| <b>261. Cultural History of Germany.</b> (3) W. | Watkins |
| <b>294. Seminar in Literature.</b> (2) S.       | Staff   |
| <b>300. Thesis for Master's Degree.</b>         | Staff   |

## Italian

### Lower Division Courses

- 1, 2, 3. First Year Italian.** (5-5-5) A.W.S. (GER-HA) Watkins, Gibson  
 Special attention to accurate pronunciation for the benefit of the students of music and art for whom Italian has special interest and value. Grammar and graded reading.

### Upper Division Courses

- 101, 103, 105. Second Year Italian.** (3-3-3) A.W.S. Prerequisite: Italian 3 or two units of Italian in high school. Watkins
- 102, 104, 106. Second Year Italian.** (2-2-2) A.W.S. Prerequisite: Italian 3 or three units of Italian in high school. Watkins
- 107, 108, 109. Individual Study in Italian.** (1-3, 1-3, 1-3) A.W.S. Prerequisite: 15 hours of Italian or the equivalent, and the consent of the instructor. Watkins  
 Assignments made to fit the individual needs of the student.
- 111, 112, 113. Masterpieces of Italian Literature.** (3-3-3) A.W.S. (†GER-HA) Prerequisites: Italian 105 and 106, or consent of instructor. Cummings  
 Extensive and intensive reading from Italian masterpieces.

## Japanese

### Lower Division Courses

- 1, 2, 3. First Year Japanese.** (5-5-5) A.W.S. (GER-HA) Staff  
 Constant study of the writing systems. Fundamentals of grammar and the building of a substantial vocabulary. Easy conversation and composition throughout.

### Upper Division Courses

- 101, 103, 105. Second Year Japanese.** (3-3-3) A.W.S. Prerequisite: Japanese 3. Staff
- 102, 104, 106. Second Year Japanese.** (2-2-2) A.W.S. Prerequisite: Japanese 3. Staff
- 107, 108, 109. Individual Study in Japanese.** (1-3, 1-3, 1-3) A.W.S. Prerequisites: 15 hours or more of Japanese and the consent of the instructor. Staff



## Portuguese

### Lower Division Courses

- 1, 2, 3. **First Year Portuguese.** (5-5-5) A.W.S. (GER-HA)  
deJong  
A beginning course. Pronunciation, conversation, reading,  
and the fundamentals of grammar. Special attention to  
Portuguese as the language of Brazil.

### Upper Division Courses

- 101, 103, 105. **Second Year Portuguese.** (3-3-3) A.W.S. Pre-  
requisite: Portuguese 3 or three units of Portuguese in high  
school. Staff
- 102, 104, 106. **Second Year Portuguese.** (2-2-2) A.W.S. Pre-  
requisite: Portuguese 3 or two units of Portuguese in high  
school. deJong
- 107, 108, 109. **Individual Study in Portuguese.** (1-3, 1-3, 1-3)  
A.W.S. Prerequisite: 15 hours of Portuguese or the equivalent  
and the consent of the instructor. de Jong
- 111, 112, 113. **Masterpieces of Brazilian and Portuguese Liter-  
ature.** (3-3-3) A.W.S. (†GER-HA) Prerequisites: Portuguese  
105 and 106, or consent of instructor. de Jong
- 121, 122, 123. **Portuguese Composition and Conversation.** (3-3-3)  
A.W.S. Prerequisites: Portuguese 104 and 106; 25 hours of  
Portuguese or the equivalent. de Jong

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- 201, 202, 203. **Portuguese Composition and Conversation.** (3-3-3)  
A.W.S. de Jong
231. **Introduction to Portuguese Literature.** (3) A. de Jong
232. **Portuguese Literature.** (3) W. de Jong
233. **Contemporary Portuguese Literature.** (3) S. de Jong
255. **Introduction to Brazilian Literature.** (3) A. de Jong
256. **Brazilian Literature.** (3) W. de Jong
257. **Contemporary Brazilian Literature.** (3) S. de Jong
294. **Portuguese Seminar.** (3) S. de Jong

296. Individual Study. (2) A.W.S. Staff  
 300. Thesis for Master's Degree. Staff

## Russian

### Lower Division Courses

- 1, 2, 3. First Year Russian. (5-5-5) A.W.S. (GER-HA) Gubler  
 Designed for those who have had no Russian. Pronunciation, reading, the fundamentals of grammar, and the building of a substantial reading vocabulary.

### Upper Division Courses

- 101, 103, 105. Second Year Russian. (3-3-3) A.W.S. Prerequisite: Russian 3. Gubler  
 Russian grammar.
- 102, 104, 106. Second Year Russian. (2-2-2) A.W.S. Prerequisite: Russian 3. Gubler  
 Readings from Russian Literature.
- 107, 108, 109. Individual Study in Russian. (1-3, 1-3, 1-3) A.W.S. Prerequisite: 15 hours of Russian and the consent of the instructor. Assignments are made to fit individual needs. Gubler

## Spanish

### Lower Division Courses

- 1, 2, 3. First Year Spanish. (5-5-5) A.W.S. (GER-HA) Wilkins, Gibson, Staff  
 Designed for those who have not had Spanish. Pronunciation, reading, and the fundamentals of grammar. Special emphasis on the building of a substantial vocabulary.

### Upper Division Courses

- 101, 103, 105. Second Year Spanish Reading and Conversation. (3-3-3) A.W.S. Prerequisite: Spanish 3, or three units of Spanish in high school, or consent of instructor. Must be taken with 102, 104, 106. Wilkins, Gibson, Staff
- 102, 104, 106. Second Year Spanish Conversation and Grammar. (2-2-2) A.W.S. Prerequisite: Spanish 3, or three units of Spanish in high school, or consent of instructor. Must be taken with 101, 103, 105. Wilkins, Gibson, Staff
- 107, 108, 109. Individual Study in Spanish. (1-3, 1-3, 1-3) A.W.S. Prerequisite: 15 credit hours of Spanish and the consent of the instructor. Staff  
 Assignments are made to fit the individual needs of the student.

- 111, 112, 113. Masterpieces of Spanish and Spanish-American Literature.** (3-3-3) A.W.S. (†GER-HA) Prerequisites: Spanish 105 and 106, or consent of the instructor. Gibson
- 115, 116, 117. Gospel in Spanish.** (2-2-2) A.W.S. Prerequisite: 25 hours of Spanish or the consent of the instructor. Gibson  
Discussions of the gospel message and the reading of the scriptures in Spanish. The aim of this course is to give the student practice in conversation and to widen his knowledge of the Gospel. (See Church Administration 137, 138, 139.)
- 121, 122, 123. Spanish Composition and Conversation.** (3-3-3) A.W.S. Prerequisites: Spanish 103 and 104. Wilkins
- 131, 132, 133. Introduction to Spanish Literature and Culture.** (3-3-3) A.W.S. (†GER-HA) Prerequisite: 30 hours of Spanish or the consent of the instructor. Gibson
- 151. Drama of the 20th Century in Spain.** (3) W. (Not given this year.) Prerequisites: Spanish 105 and 106, or consent of the instructor. Taylor
- 157. Introduction to Spanish-American Literature and Culture.** (3) A. Wilkins
- 158. Modern Mexican Novel.** (3) W. Prerequisites: Spanish 105 and 106, or consent of the instructor. Wilkins  
Lectures on and class discussion of Nineteenth and Twentieth Century Mexican novels with emphasis on novels written since the Revolution of 1910.
- 159. Modern South American Novel.** (3) S. Prerequisites: Spanish 105 and 106, or consent of the instructor. Wilkins  
Lectures on and class discussion of Nineteenth and Twentieth Century South American novels.
- 171. Spanish Seminar.** (3) S. Prerequisite: Consent of department head. Wilkins  
Research problems for advanced students.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- 201. Spanish Composition and Conversation.** (3) A. Wilkins
- 231. Medieval Literature.** (3) A. Prerequisite: 133 or equivalent. Gibson
- 232. Cervantes' Don Quixote.** (3) (Not given this year.) Prerequisite: 133 or equivalent. Gibson

233. **Drama of the Spanish Golden Age.** (3) W. Prerequisite: 133 or equivalent. Gibson
236. **Spanish Literature of the 19th Century.** (3) S. Prerequisite: 133 or equivalent. Gibson
237. **Literature of the 20th Century in Spain.** (3) W. Prerequisite: 133 or equivalent. Wilkins
251. **Drama of the 20th Century in Spain.** (3) S. (Not given this year.) Prerequisite: 133 or equivalent. Taylor
252. **Spanish Novel of the 19th Century.** (3) A. (Not given this year.) Prerequisite: 133 or equivalent. Taylor
255. **Spanish-American Poetry.** (3) (Not given this year.) Staff
261. **Hispanic American Civilizations of the Colonial Period.** (3) (Not given this year.) Wilkins
262. **Hispanic American Civilizations of the Modern Period.** (3) (Not given this year.) Wilkins
263. **Hispanic American Essay.** (3) (Not given this year.) Wilkins
294. **Spanish Seminar.** (3) A.W.S. Wilkins, Staff
300. **Thesis for Master's Degree.** Staff

## CLASSICAL LANGUAGES

### Latin

#### Lower Division Courses

- 1, 2, 3. **First Year Latin.** (5-5-5) A.W.S. (GER-HA) Clark, Gibson  
 Designed for those who have not had Latin. Mastery of pronunciation, declensions, and conjugations. Correlation of Latin originals with English derivatives. Graded reading. Characteristics of Roman civilization.

#### Upper Division Courses

- 101, 103, 105. **Second Year Latin.** (3-3-3) A.W.S. Prerequisite: Latin 3 or three units in high school. Clark  
 Readings from Caesar, Livy, etc., with a review and continuation of grammar.
- 107, 108, 109. **Individual Study.** (2-3, 2-3, 2-3) A.W.S. Clark, Gibson
140. **Pre-legal Latin.** (2 or 3) A. Clark  
 Recommended for pre-legal students. Admission by consent of instructor.

- 141, 142. Pre-medical Latin and Greek.** (2 or 3) W.S. Clark  
Recommended for pre-medical students. Admission by consent of instructor.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- 267, 268, 269. Cicero; Virgil; Latin Style and Composition.**  
(3-3-3) A.W.S. Clark
- 277, 278, 279. Horace; the Latin Poets; the Latin Dramatists.**  
(3-3-3) A.W.S. Clark
- 281, 282, 283. The Latin Fathers.** (3-3-3) A.W.S. Prerequisite:  
Consent of instructor. Nibley
- 300. Thesis for Master's Degree.** Staff

## Greek

### Lower Division Courses

- 1, 2, 3. Elementary Greek.** (5-5-5) A.W.S. (GER-HA) Nibley

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- 264, 265, 266. Second Year Greek.** (3-3-3) A.W.S. Prerequisite:  
One year of Greek. Nibley
- 267, 268, 269. The Greek New Testament.** (3-3-3) A.W.S. Pre-  
requisite: One year of Greek. Nibley
- 271, 272, 273. Individual Study in Greek.** (2-3, 2-3, 2-3) A.W.S.  
Nibley
- 277, 278, 279. Greek Prose Writers.** (2-3, 2-3, 2-3) A.W.S. Pre-  
requisite: Two years of Greek. Nibley
- 300. Thesis for Master's Degree.** Staff

## Semitics

### Hebrew, Aramaic, Syraic, Akkdadian, Egyptian

(For Semitic languages other than Arabic, see Division of Religion, Semitic Languages. The courses in Semitic Languages carry credit in religion, and fulfill the language requirements for the A.B. degree.)

### Lower Division Courses

- 1, 2, 3. **First Year Arabic.** (5-5-5) A.W.S. (GER-HA) Nibley  
The modern spoken language. Designed for those who have had no Arabic. (See Biblical Languages 261, 262, 263.)

### Graduate Courses

(See Archaeology or Bible and Modern Scripture for courses in Hebrew, Aramaic, Syraic, Akkadian, and Egyptian.)

## LINGUISTICS

### Lower Division Course

60. **Practical Phonetics.** (3) A.W.S. de Jong  
The elementary principles of speech mechanics in their relation to correct diction. (See also Speech 60.)

### Upper Division Courses

101. **The Literary Use of Language.** (2) A. No prerequisites. Cummings  
160. **Advanced Phonetics.** (3) W. de Jong

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

201. **Introduction to Language Science.** (3) S. Gibson  
221. **Studies in Criticism.** (3) A. Cummings  
231. **Introduction to Romance Philology.** (3) A. Clark  
246. **Old French Morphology and Phonology.** (3) A. Clark  
251. **History of the Spanish Language.** (3) W. Gibson  
266. **Gothic and Introduction to Comparative Germanic Grammar.** (5) W. Watkins  
267. **Old High German and Old Saxon.** (3) W. Watkins  
268. **Middle High German.** (3) A. Watkins  
291. **Seminar in Philology.** (2) S. Staff

## Music

**Professors:** Halliday (chairman, 250C), de Jong, Jepperson-Madsen (emeritus), Madsen (emeritus).

**Associate Professors:** Earl, Gates, Sardoni.

**Assistant Professors:** Buggert (emeritus), Gulbrandsen, W. F. Hansen (emeritus), Keeler, H. R. Laycock\*, R. G. Laycock, F. D. Madsen, Summerhays (emeritus), Wakefield, N. B. Weight.

**Instructors:** Ballou, Bos, C. Cannon, Edlefsen, Fitzroy, Fuerstner, McAllister (emeritus), E. E. Nelson.

A baccalaureate degree in music can be taken with a major in Music Applied, Music Theory, or Music for Secondary Teachers.

A minor in the Department of Music should include: Piano, 6 hours or the equivalent; General Music 1; Theory of Music 21, 22, 23; and Ensemble, 3 hours.

### GENERAL REQUIREMENTS

To receive the baccalaureate degree in music a student must complete the following basic work:

Harmony, Solfeccio, and Keyboard Work .....	30 hours
History of Music.....	9 hours
Advanced Conducting .....	2 hours

### DEGREE IN MUSIC APPLIED

In addition to the general requirements listed above, a major in Music Applied must include the following:

**Pass grade \*6 c on major instrument by the end of the sophomore year.**

**Ensemble (band, chorus, opera, orchestra, piano accompanying) ..... 12 hours**

**Major Instrument (pass grade \*8 c before a faculty examining committee or be presented in a senior recital)**

**A minimum of 60 minutes of recital appearance as soloist or chamber ensemble performer.**

**Vocal music majors also take Linguistics 60 (3 hours), Art Song Interpretation, and Vocal Pedagogy.**

It is advisable for instrumental music majors to have some participation in small chamber music ensembles.

Recommended course for first year:

	A	W	S	Total
Religion .....	2	2	2	6
Physical Education .....	1	1	1	3
English .....	3	3	3	9
Foreign Language .....	5	5	5	15
Band, orchestra, chorus or other ensemble .....	2	2	2	6
Private study on major instrument or in voice .....	2	2	2	6
Piano .....	2	2	2	6
Health .....		1		1
Total Hrs. ....	17	18	17	52

(\*The arabic numerals 1, 2, 3, etc., represent the amount of progress usually made in that number of years. The letters a, b, c represent roughly the three quarters of the academic year.)

At the end of each year, a music major will take an examination on his major instrument or in voice to determine the level of his achievement. (i.e., his grade, as 1b, 3c, 6a, etc.) Arrangements for time and place of this examination are made by the student through the Chairman of the Music Department. At the time of the examination each candidate will submit to the jury a list of his repertoire in triplicate, indicating the compositions or studies he has prepared especially to perform at the examination. He will also demonstrate his ability to perform scales and arpeggios.

### DEGREE IN MUSIC FOR SECONDARY TEACHERS

In addition to the general requirements listed above, a composite major in Music for Secondary Teachers must include the following:

Ensemble (band, chamber music, chorus, opera, orchestra, piano accompanying - 6 hours in major field, 3 in minor) .....	9 hours
Major instrument (pass grade *4 c before a faculty examining committee) (See * under "Degree in Music Applied.")	
Minor instruments (pass grade 1 a in percussion, grade 1 b in voice, and 1 b on one instrument in each family of the orchestra not represented by the major instrument)	
Advanced conducting (additional) .....	2 hours
Instrumental methods .....	2 hours
Practical phonetics .....	3 hours
Accumulate 20 minutes of recital appearance as soloist or chamber ensemble performer.	



Students who expect to be recommended as teachers of instrumental music only may substitute more work on the major instrument (pass grade 5 c) in place of the voice requirement, which is 3 hours of vocal instruction, 3 hours of vocal ensemble, and 2 hours of choral conducting, but must have a teaching minor outside the field of music.

Students who expect to be recommended to teach vocal music only may substitute more work in voice building, art song interpretation, and vocal pedagogy, and more work on piano (voice grade 5c with piano grade 2c or voice grade 2c with piano grade 5c or the equivalent) in place of studying minor instruments and instrumental conducting, but must have a teaching minor outside the field of music.

Students preparing to teach piano should also take Piano Pedagogy (Music Applied 190 or 190-p) and Piano Repertoire Music Applied 179, 180, 181.)

Recommended course for first year students who wish to major in Music for Secondary Teachers:

	A	W	S	Total
Religion .....	2	2	2	6
Physical Education .....			1	1
Foreign Language .....	5	5	5	15
English .....	3	3	3	9
Private Piano .....	2	2	2	6
Private Study on Major Instrument ..	2	2	2	6
Band, Orchestra, or other Ensemble ..	1	1	1	3
Hygiene .....			1	1
Psychology 1 .....	2			2
Linguistics 60 .....		3		3
Total Hrs. ....	17	18	17	52

Students who do not expect to be recommended as teachers of music in the public schools may substitute more work on the major instrument (pass grade 6 c) for the minor instrument requirement.

### DEGREE IN MUSIC THEORY

In addition to the general requirements listed above, a major in Music Theory must include the following:

Pass piano grade \*2 c and grade 4 c on some other instrument or 6 c on piano only.

(See \* under "Degree in Music Applied.")

Ensemble .....	6 hours
Advanced Harmony at the Keyboard .....	6 hours
Aesthetics .....	2 hours
Graduate courses in Music Theory .....	15 hours

Recommended course for first year students who wish to major in Music Theory:

	A	W	S	Total
Religion .....	2	2	2	6
Piano .....	2	2	2	6
English .....	3	3	3	9
Foreign Language .....	5	5	5	15
Theory of Music 21, 22, 23 .....	5	5	5	15
Band, Orchestra, Chorus, or other ensemble .....	1	1	1	3
Total Hrs. ....	18	18	18	54

### General Music

(For non-music majors)

#### Lower Division Courses

1. A Survey Course in Music. (3) A.W.S. (GER-HA) Earl, Cannon

A non-technical course without prerequisite designed to increase the appreciation and enjoyment of the masterpieces of music literature of all periods through a study of styles, forms, and composers, through attending and discussing lyceum presentations, and through listening to recordings.

2. Fundamentals of Music. (3) A.W.S. Halliday

An introductory course in music fundamentals, especially designed for those who have not had sufficient practical experience in music to meet the prerequisites of other music courses and for public school teachers.

40. Class Piano Instruction. (1) A.W.S. Staff

Two periods per week. Class instruction for beginners in the elements of music and in keyboard technique. Especially designed for prospective elementary teachers.

#### Upper Division Course

138. Secondary Student Teaching (Music). (5-5-5) A.W.S. F. D. Madsen  
(See Instruction 138 for details on registration fees etc.)

139. Secondary Student Teaching (Music). (7-11, 7-11, 7-11) A.W.S. F. D. Madsen  
(See Instruction 138 for details on registration fees etc.)

190. Public School Methods. (3) A.W.S. Prerequisite: General Music 2 or Music Theory 21, or the equivalent. F. D. Madsen  
Special technique of instruction and materials for the grades; class demonstrations and supervised teaching. (See Instruction 107.)

#### Graduate Course

230. Teaching Music in Secondary Schools. (3) W. F. D. Madsen  
(See Instruction 230.)

## Music Theory

### Lower Division Courses

- 21, 22, 23. First Year Harmony, Solfeggio, and Keyboard Work.** (5-5-5) A.W.S. Prerequisite: one year of private piano or its equivalent. One hour laboratory each day in the autumn and winter quarters, and three days a week in the spring quarter.

Sardoni, Wakefield,

H. Laycock, Cannon, R. Laycock

Tonal harmony, correlating part writing, melodic and harmonic dictation, keyboard work, and sight singing.

### Upper Division Courses

- 121, 122, 123. Second Year Harmony, Solfeggio, and Keyboard Work.** (5-5-5) A.W.S. Prerequisite: Theory of Music 23 or its equivalent. Two laboratory periods per week.

Sardoni, Cannon, H. Laycock, Gates

A continuation of Harmony 23, involving longer and more complex melodies in harmonization and dictation; modulations, altered chords, and analysis.

- 181, 182, 183. Advanced Harmony at the Keyboard.** (2-2-2) A.W.S. Prerequisite: Theory of Music 123.

Keeler

Harmonization of figured and unfigured basses and other voices, cadences, sequences, transpositions, modulations, and improvisations at the keyboard.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

- 211, 212, 213. Counterpoint.** (3-3-3) A.W.S. Prerequisite: Theory of Music 123.

Gates

- 221, 222. Form and Analysis.** (3-3) W.S. Prerequisite: Music Theory 123.

Staff

- 223. Materials of Modern Music.** (3) A. Prerequisite: Music Theory 123.

Staff

- 231, 232, 233. Instrumentation.** (3-3-3) A.W.S. Prerequisite: Music Theory 123.

Sardoni, Gates

- 271, 272, 273, 274, 275, 276. Composition.** (3-3-3-3-3-3) A.W.S. Prerequisite: Music Theory 123.

Staff

- 300. Thesis for Master's Degree.**

Staff

Candidates for the master's degree are required to submit to the thesis committee a research paper (or composition) to prove competence in writing and research (or ability to compose) before work is started on the thesis.

## Musicology

### Upper Division Courses

157. **Sacred Music.** (2-2-2) A.W.S. (GER-HA; GER-R) (See Church Administration 157. Halliday, Sardoni  
Hymnology and baton technique.
161. **Sacred Music Before 1650.** (2) A. (GER-HA; GER-R) (See Church Administration 161.) Keeler  
Gregorian chant, mass, motet, oratorio, the early passions.
162. **Sacred Music from 1650 to 1750.** (2) W. (GER-HA; GER-R) (See Church Administration 162.) Keeler  
The cantata, chorale, and passion.
163. **Sacred Music from 1750 to the Present.** (2) S. (GER-HA; GER-R) (See Church Administration 163.) Keeler  
Requiem mass, anthem, hymn, Latter-day Saint hymns.
176. **Aesthetics.** (2) W. or S. de Jong  
Theoretical and practical criteria of aesthetic values.
- 184, 185, 186. **History of Music.** (3-3-3) A.W.S. (†GER-HA) Pre-requisite: Music Theory 123. Wakefield, Cannon  
Alien musical systems, ancient and modern; medieval and modern music.

### Graduate Courses

For regulations governing study beyond the bachelor's degree see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

It is recommended that musicology majors take at least one quarter of counterpoint (Music Theory 211) and the courses in form and analysis (Music Theory 221, 222).

201. **Introduction to Research Techniques.** (2) A. Earl
211. **History and Literature of Music through the Renaissance.** (5) A. Cannon
212. **History and Literature of Music in the Baroque and Classic Periods.** (5) W. Cannon, Wakefield, Keeler
213. **History and Literature of Music in the Romantic and Modern Periods.** (5) S. Wakefield

Musicology 211, 212, 213 constitute a core-course in Musicology and are required of any graduate student who intends to receive the Master's Degree with a major or minor in Musicology. It is possible to major in Music Theory with a split minor in Applied Music and Musicology, in which case 211, 212, 213 will not be required.

221. **The Symphony.** (2) A. Wakefield  
 222. **Chamber Music.** (2) W. Wakefield  
 223. **The Opera.** (2) A. Earl  
 224. **Choral Music.** (2) S. Cannon  
 294, 295, 296. **Seminar in Musicology.** (2-2-2) A.W.S. Prerequisite: Musicology 201. Cannon  
 297. **Special Readings in Musicology.** (2) A.W.S. Wakefield  
 300. **Thesis for Master's Degree.**

Candidates for a Master's Degree are required to submit to the thesis committee a research paper to prove competence in writing and research before work is started on the thesis.

## Music Applied

### Lower Division Courses

- 1, 2, 3, 4, 5, 6. **University Chorus.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Not open to voice majors. Gates  
 7, 8, 9, 10, 11, 12. **College Choir.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Admission by consent of director. Weight  
 13, 14, 15, 16, 17, 18. **A Cappella Choir.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Admission by consent of director. Weight  
 19, 20, 21, 22, 23, 24. **Madrigal Singers.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Halliday  
 For trained singers: madrigals, motets, cantatas, etc. Admission by consent of the director.  
 25, 26, 27, 28, 29, 30. **Opera Workshop.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Admission by consent of director. Earl, et al.  
 Operatic styles and traditions. One opera or concert of operatic music given during each quarter. Particularly for those whose interests lead them into both vocal and dramatic work.  
 31-, 32-, 33-, 34-, 35-, 36-p. **Private Instruction.** (2-2-2-2-2-2) A.W.S. (GER-HA) Ten lessons per quarter.  
 Strings: Violin, Viola, 'Cello, String Bass. Sardoni, Buggert, H. Laycock  
 Woodwinds: Flute, Oboe, Clarinet, Bassoon, Saxophone. R. Laycock, Edlefsen, Halliday, Bos  
 Brass: Trumpet, Cornet, French Horn, Trombone, Baritone, Tuba. Ballou  
 Percussion: Drums and Tympani. R. Laycock

- Piano: Nelson, Hanson, Fitzroy, Keeler, Wakefield, Cannon,  
Gates, de Jong, Fuerstner
- Harpsichord: Wakefield
- Organ: de Jong, Keeler
- Recorder: Wakefield, Cannon
- Voice: Jepperson-Madsen, Madsen, Halliday, Weight,  
Summerhays, Earl, Gulbrandsen,  
McAllister, Judd
- 37, 38, 39. **Group Vocal Instruction.** (1-1-1) A.W.S. Two periods  
per week. Gulbrandsen
40. **Group Percussion Instruction.** (1) A. Two periods per week.  
R. Laycock
41. **Group Clarinet Instruction.** (1) A. Two periods per week.  
Edlefsen
42. **Group Trumpet Instruction.** (3) W. Five periods per week.  
Ballou
43. **Group Violin Instruction.** (3) W. Five periods per week.  
Sardoni, H. Laycock
- 44, 45, 46. **Women's Chorus.** (1-1-1) A.W.S. (GER-HA) Five  
periods per week. Gulbrandsen
- 47, 48, 49. **Piano Accompanying.** (1-1-1) A.W.S. Three clock  
hours per week. Staff
- 51, 52, 53, 54, 55, 56. **Varsity Band.** (1-1-1-1-1) A.W.S.  
(GER-HA) Five periods per week. Admission by consent  
of director. Ballou
- 57, 58, 59. **Chamber Orchestra.** (1-1-1) A.W.S. (GER-HA) Five  
periods per week. Admission by consent of director.  
H. Laycock
60. **Phonetics.** (3) A.W.S. (See Linguistics 60.) de Jong
- 61, 62, 63, 64, 65, 66. **Concert Band.** (1-1-1-1-1) A.W.S.  
(GER-HA) Five periods per week. R. Laycock  
Admission by consent of director. It is recommended that  
instrumental music majors who belong to the concert band  
play at least one winter quarter in varsity band, preferably  
on a minor instrument.
- 67, 68, 69, 70, 71, 72. **Symphony Orchestra.** (1-1-1-1-1) A.  
W.S. (GER-HA) Five periods per week. Sardoni  
Admission by consent of director.
- 73, 74, 75, 76, 77, 78. **Piano, String, Woodwind, and Brass  
Ensemble.** (1-1-1-1-1) A.W.S. Three periods per week.  
Sardoni, H. Laycock, Fuerstner, Ballou, Edlefsen
- 91, 92, 93. **Vocal Ensemble.** (1-1-1) A.W.S. Three periods per  
week. Earl, Weight, Gulbrandsen
- 94, 95, 96, 97, 98, 99. **R.O.T.C. Chorus.** (1-1-1-1-1) A.W.S.  
(GER-HA) Five periods per week. Gulbrandsen

## Upper Division Courses

- 101, 102, 103, 104, 105, 106. University Chorus.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Not open to voice majors. Gates
- 107, 108, 109, 110, 111, 112. College Choir.** (1-1-1-1-1-1) A. W.S. (GER-HA) Five periods per week. Weight Admission by consent of director.
- 113, 114, 115, 116, 117, 118. A Cappella Choir.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Weight Admission by consent of director.
- 119, 120, 121, 122, 123, 124. Madrigal Singers.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Halliday  
For trained singers: madrigals, motets, cantatas, etc. Admission by consent of director.
- 125, 126, 127, 128, 129, 130. Opera Workshop.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Earl, et. al.  
(See Music Applied 25.) Admission by consent of director.
- 131-, 132-, 133-, 134-, 135-, 136-p. Private Instruction.** (2-2-2-2-2-2) A.W.S. (GER-HA) Ten lessons per quarter. (See Music Applied 31-p.) Staff
- 137, 138. Instrumental Methods.** (1-1) W.S. Two periods per week. Prerequisite: One quarter private or group instruction on some brass, woodwind, and string instrument. Edlefsen
- 141, 142, 143, 144, 145, 146. Women's Chorus.** (1-1-1-1-1-1) A.W.S. Five periods per week. Gulbrandsen
- 147, 148, 149. Piano Accompanying.** (1-1-1) A.W.S. Three clock hours per week. Staff
- 151, 152, 153, 154, 155, 156. Varsity Band.** (1-1-1-1-1-1) A.W. S. (GER-HA) Five periods per week. Ballou  
Admission by consent of director.
- 157, 158, 159. Chamber Orchestra.** (1-1-1) A.W.S. (GER-HA) Five periods per week. Admission by consent of director. H. Laycock
- 161, 162, 163, 164, 165, 166. Concert Band.** (1-1-1-1-1-1) A. W.S. (GER-HA) Five periods per week. Admission by consent of director. R. Laycock
- 167, 168, 169, 170, 171, 172. Symphony Orchestra.** (1-1-1-1-1-1) A.W.S. (GER-HA) Five periods per week. Sardoni  
Admission by consent of director.
- 173, 174, 175, 176, 177, 178. Piano, String, Woodwind, and Brass Ensemble.** (1-1-1-1-1-1) A.W.S. Three periods per week. Sardoni, Dallin, H. Laycock, Fuerstner, Ballou, Edlefsen

- 179, 180, 181. **Piano Repertoire.** (1-1-1) A.W.S. Two periods per week. Fuerstner
- 182, 183, 184. **Vocal Repertoire.** (1-1-1) A.W.S. Two periods per week. Staff
185. **The Art of Piano Accompaniment.** (1) A. Two periods per week. Fuerstner
- 186, 187, 188. **Organ Problems.** (2-2-2) A.W.S. Admission by consent of instructor. Prerequisite: Advanced standing as an organ student. Keeler  
Registration for solo and accompaniment. Problems incident to accompaniment playing; other related problems.
189. **Interpretation of Art Songs.** (1) A. Two periods per week. Fuerstner
190. **Piano Pedagogy.** (2) W. Methods, materials, and problems of piano teaching in the higher grades. Staff
- 190-p. **Piano Pedagogy.** (2) S. Methods, materials, and problems of teaching piano. Nelson
- 191, 192, 193. **Vocal Ensemble.** (1-1-1) A.W.S. Three periods per week. Weight, Gulbrandsen, Earl
- 194, 195, 196. **R.O.T.C. Chorus.** (1-1-1) A.W.S. (GER-HA) Five periods per week. Gulbrandsen
197. **Choral Conducting.** (2) A. Prerequisites: Music Theory 123 and Musicology 157, 186. Weight  
Baton technique, methods, literature and materials.
198. **Band Conducting and Related Problems.** (2) W. Prerequisites: Music Theory 123 and Musicology 157, 186. R. Laycock  
Baton technique, band organization and administration, materials and methods for band and individual band instruments.
199. **Orchestral Conducting and Related Problems.** (2) S. Prerequisites: Music Theory 123 and Musicology 157, 186. Sardoni  
Baton technique, bowing, editing of parts, score reading, materials and methods for orchestra and individual orchestral instruments.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.



**200. Choral Problems.** (2) W. Prerequisite: Applied Music 197.  
Weight

**231-, 232-, 233-, 234-, 235-, 236-p. Private Instruction.** (2) A.W. S. Ten lessons per quarter. Prerequisite: Excellence attained to the equivalent of two years of private study on the college level.

Strings: Violin, Viola, 'Cello, String Bass.

Sardoni, H. Laycock

Woodwinds: Flute, Oboe, Clarinet, Saxophone, Bassoon.

R. Laycock, Edlefsen

Brass: Trumpet, Cornet, French Horn, Trombone, Baritone,  
Tuba.

Ballou

Percussion: Drums and Tympani.

R. Laycock

Piano: Keeler, Wakefield, Gates, Fuerstner, Cannon

Organ: de Jong, Keeler

Voice: , Halliday, Weight, Earl, Gulbrandsen, Judd

**237. Solo Recital.** (3) A.W.S. Required of all students minoring in Music Applied.

**251. Vocal Pedagogy.** (2) W. Theory of Teaching Voice. Halliday

## Nursing

Associate Professors: Chapman (director, 10 Nur), Jenny.

Assistant Professors: Cochran, Jahraus, Nagele.

Instructors: Allred, Alward, R. H. Andersen, Harris, A. L. Hunt, Kohler, N. Potter, E. Richards, A. A. Wilson.

### I. For Non-Nursing Majors:

#### Lower Division Course

7. **Family Health and Home Nursing.** (2) A.W.S. Jenny, Staff  
Essential knowledge and attitudes about healthful family living. Skills in giving simple home nursing care to the sick or injured. Essentials of maternal health and child care. (See Family Life 80.)

### II. For Majors in Nursing:

#### Lower Division Courses

1. **Introduction.** (2) A. Richards, Wilson, Harris  
Foundation for an understanding of nursing, its meaning and its implications, and the role of nursing in health and illness.
3. **Fundamentals.** (2) W. Prerequisite: Nursing 1. Richards, Wilson, Harris  
Introduction to the fundamental needs of an individual in health and illness, the community resources to meet these needs, and a nurse's role in relation to these needs.
5. **Fundamentals.** (2) S. Prerequisite: Nursing 3. Richards, Wilson, Harris  
Theory and principles relating to the basic nursing skills and techniques in patient care.
6. **Fundamentals Laboratory.** (2) S. Laboratory six hours per week, including three hours at Utah Valley Hospital. Concurrent registration in Nursing 5 required. Richards, Wilson, Harris  
Introductory clinical course to enable the student to develop competency in the fundamental nursing skills and techniques.
9. **Fundamentals.** (2) A. Prerequisite: Nursing 5. Richards, Wilson, Harris  
Continuation of the theory of basic nursing skills and techniques involved in comprehensive nursing care.
10. **Fundamentals Laboratory.** (4) A. Laboratory twelve hours per week, including eight hours at Utah Valley Hospital. Concurrent registration in Nursing 9 required. Richards, Wilson, Harris  
Continuation of clinical course in the more complex fundamental nursing skills and techniques.

15. **Pharmacy and Pharmacology.** (2) A. Credit or concurrent registration in Nursing 10 required. Staff  
Drugs, actions, dosages, administration, and mathematics.
17. **Pharmacy and Pharmacology.** (3) W. Prerequisite: Nursing 15. Staff  
Preparation of drugs and solutions, administration, legislation, and therapeutics.
19. **Maternal and Child Care.** (4) W.S. Prerequisite: Nursing 9. Alward, Kohler  
Social and health aspects of, and nursing responsibility in pregnancy, labor, delivery, and the puerperium, including care of the premature and the full-term infant.
20. **Maternal and Child Care Laboratory.** (6) W.S. Concurrent registration in Nursing 19 required. Alward, Kohler  
Experience in the care and management of the obstetric patient in the physician's office, out-patient clinic, and hospital maternity divisions, including the labor and delivery suite, post partum floors, new born and premature nurseries.
21. **Comprehensive Nursing Care.** (3) S. Staff  
Principles and methods of correlating health, and social and emotional aspects of nursing in planning comprehensive nursing care with ill patients. Includes interview techniques and interpersonal relations studies.
23. **Maternal and Child Care.** (4) W.S. Prerequisites: Nursing 9 and 15. Cochran, Potter  
Study of the child from infancy through early adolescence as related to growth and development, and changes in behavior patterns which are indicative of illness. Study of children's diseases, related child care, and nursing skills required in special therapies. Nursery and Public School observation of normal child behavior at work and play.
24. **Maternal and Child Care Laboratory.** (6) W.S. Concurrent registration in Nursing 23 required. Cochran, Potter  
Experience in the care of the ill child in convalescent and general hospitals, including physical, occupational, and play therapy.
25. **Trends in Nursing.** (2) W. Staff  
A study of the relationships, the origin, and development of nursing to present patterns of nursing.

#### Upper Division Courses

101. **Introduction to Medical-Surgical Nursing.** (8) Summer. Three hours class plus fifteen hours laboratory. Prerequisites: Nursing 17, 19, and 23. Nagele, Staff  
Approach to study of medical-surgical nursing from the standpoint of common symptoms of typical medical and surgical conditions. Experience in giving comprehensive nursing care, with emphasis on meaning of illness to patient and family, and nurse's reaction to symptoms and illness. Basic nursing skills and understandings essential to meeting physical, emotional, and social needs of the patient.

- 103. Practical Aspects of Medical-Surgical Nursing.** (4) Summer. Two hours class and six hours laboratory. Prerequisite: Nursing 101. Nagele, Staff  
Designed to prepare nurses to meet the everyday health needs related to medical-surgical nursing of people in all situations.
- 111. Intermediate Medical-Surgical Nursing.** (8) A. Three hours class and fifteen hours laboratory. Prerequisites: Nursing 101 and 103. Nagele, Staff  
Continuation of medical-surgical nursing, organized around problems of patients with impairment or loss of essential body functions: digestive, excretory, reproductive, respiratory, and circulatory.
- 115. Nutrition in Medical-Surgical Nursing.** (3) A. Two hours class and three hours laboratory. Prerequisite: Foods 50. Hunt  
Designed to give an understanding of the importance of good nutrition to the health of the patient and the role of diet in relation to the total patient treatment.
- 117. Preventative Medicine and Community Health.** (3) A.W.S. Concurrent registration in Nursing 136 required. Jenny, Staff  
The public health movement; the inter-relationship of treatment and prevention of disease; trends in communicable disease and environmental control; programs in maternal-child health; chronic diseases; the use of vital statistics; the organization and function of local, state, and national health departments.
- 119. Psychosomatic Concepts.** (3) A. Concurrent registration in Nursing 111 required. Jahraus  
Consideration of emotional response as a causative factor and as a result of disease in the human being. Effect of childhood behavior patterns as observed in illness.
- 120. Operating Room Nursing.** (4) W.S. Two hours class and eighteen hours laboratory for five weeks. Prerequisites: Nursing 19, 20, 23, and 24. Nagele, Staff  
Lecture-laboratory course in operating room technique. Emphasis on importance of teamwork in effective functioning of the operating room, understanding and application of principles of asepsis, and comprehensive nursing care of the surgical patient.
- 121. Advanced Medical-Surgical Nursing.** (3) W.S. Prerequisite: Nursing 111. Nagele, Staff  
Continuation of Nursing 111, with emphasis on advanced understanding and skills in meeting complex nursing problems.
- 125. Principles of Public Health Nursing.** (3) A.W.S. Concurrent registration in Nursing 136 required. Jenny, Allred  
The meaning and functions of public health nursing, the application of principles of comprehensive nursing in the home or community setting.

- 127. Comprehensive Nursing of the Aging Population.** (3) W.S. Jahraus, Staff  
Study of the normal behavior of the older age group. Relationship of physical, emotional, and social needs and how they can be met; specific application to the ill person. Laboratory experience integrated with Nursing 121.
- 136. Community Nursing Laboratory.** (8) A.W.S. Concurrent registration in Nursing 117 and 125 required. Jenny, Allre<sup>d</sup>  
Field work in a public health nursing agency. Experience in giving comprehensive nursing care to families in their homes, in working with allied professional workers and community agencies.
- 141. Psychiatric Nursing and Mental Health.** (5) A.W.S. Jahraus, Staff  
Principles of nursing care for the mentally ill. Discussion of basic concepts in prevention, diagnosis, and treatment of mental illness, and implications for nursing. Development of appreciation of the functions of all members of the psychiatric team. Juniors and seniors only.
- 142. Psychiatric and Mental Health Nursing Laboratory.** (8) A. W.S. Jahraus, Staff  
Clinical laboratory experience with mentally ill patients, including care of the acutely ill and convalescent patients, and observation of selected patients receiving intensive analytic and somatic therapy. Juniors and Seniors only.
- 143. Management.** (3) W. Staff
- 145. Teaching.** (4) W. Staff
- 149. Senior Seminar.** (3) W. Staff
- 150. Advanced Nursing Laboratory.** (6) W. Staff
- 151. Senior Seminar.** (4) S. Staff

## Nutrition

(See courses in Family Living.)

## Personnel and Guidance

(See Educational Research and Services.)

## Photography

(See Physics 26, 27; Art 147, 148; Education 177; Journalism 121, 122, 123, 124.)

## Physical Education

Professors: C. J. Hart (chairman, men, 222 F.H.), Holbrook (chairman, women, Women's Gym), Kimball, Nash.

Assistant Professors: Atkinson, Robison, F. W. Dixon, Soffe\*, Watts.

Instructors: Bangerter, Barney, Bunker, Cowan, Crowton, O. Dixon, Geddes\*, W. J. Hafen, M. B. Jensen, Nilsen, I. L. Peterson, Shilling, Webb.

Each freshman student is required to take one lower division physical education course during each quarter of the freshman year; in addition, he is required to take Health 1 sometime during his freshman year. A variety of activities is available for choice. A year's work in physical education activity will provide the student with an opportunity for organic development, neuromuscular skill, social contact in game and team situations, and other carry-over values.

Extra-curricular activities are promoted for student participation: games, sports, hikes, dancing, and intramural athletics. The department urges all students to participate regularly in some form of physical activity.

The Brigham Young University is a member of the Skyline Eight Conference. The school participates in a full schedule of intercollegiate athletic competition, as sponsored by the conference.

Students using the towel service are required to make a 75 cent deposit by purchasing a towel check. The towel check is exchangeable for towel service during school hours. Towel checks are redeemable at any time.

A thorough physical examination is required of each freshman student upon entering the institution. All students desiring exemption from physical education due to medical reasons must obtain such excuse from the University Physician. Written statements from the local doctor must be approved by the University Physician.

Students registered for physical education activity courses are required to provide themselves with the official uniform which may be purchased at the University book store. They are also required to provide themselves with an approved combination padlock for use on basket locker.

### PHYSICAL EDUCATION MAJOR

Students majoring in Physical Education will take the following courses: Physical Education 51, 52, 53, 54, 55, 56,

88, 89, 130, 140, 141, 143, 146, 154; Recreation 80; Health 21, 45, 50, 195. They will elect also 6 hours from among the following courses: Physical Education 133, 134, 142, 175, 230, 235, 236, and Recreation 131. In addition to the above, men majors will take Physical Education 101, 102, 103, and 104. Women majors will take Physical Education 81a, 81b, 81c, 83a, 83b, 83c, and 87. In addition all majors will take Zoology 11 and 45, Bacteriology 21, Psychology 11, and at least one course in both Chemistry and Physics.

### PHYSICAL EDUCATION MINOR

Students desiring to minor in Physical Education should take the following courses: Physical Education 51, 52, 53, 54, 55, 56, 88, 130, 141. In addition to the above, men minoring in Physical Education should take 101, 102, 103, and 104. Women minors should take 81a, 81b, and 81c and an additional three hours to be elected.

Note: see page 389 for composite major in Physical Education. Recreation and Health.

### DANCE MINOR

A minor in dance may be had by completing the following courses: Physical Education 81a, 81b, 81c, 83a, 83b, 83c, 87, 88, 89, 121, 183a, 183b, 183c, 184a, 184b, 184c, 187, 188, 189; Recreation 80 and 81; Music 1; and Speech 23.

### Pre-Physical Therapy

The department offers the following 3-year pre-physical therapy curriculum for physical education majors who desire to qualify for entrance into physical therapy professional schools.

#### Proposed Curriculum

Freshman Year			
Autumn		Chemistry 8 .....	5
Religion .....	2	Bacteriology 21 .....	4
Phys. Ed. 51 .....	2	Air Science (optional) ....	2
English 1 .....	3		
Foods 50 .....	3	Total Hrs. ....	18
Chemistry 7 .....	5	Spring	
Air Science (optional) ....	2	Religion .....	2
		English 3 .....	3
Total Hrs. ....	17	Sociology 11 .....	5
Winter		Zoology 11 .....	5
Religion .....	2	Health 1 .....	1
Phys. Ed. 52 .....	2	Air Science (optional) ....	2
English 2 .....	3		
		Total Hrs. ....	18

**Sophomore Year****Autumn**

Religion .....	2
Phys. Ed. 54 .....	2
English (elective) .....	3
Zoology 48 .....	5
History 70 .....	5
Air Science (optional) ....	2

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 Totals Hrs. .... 19
**Winter**

Religion .....	2
Phys Ed. 88 .....	1
Psychology 11 .....	5
Math 1 or 11 .....	5
Air Science (optional) ....	2
Elective .....	3

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 Total Hrs. .... 18
**Spring**

Religion .....	2
Phys Ed. 120 .....	2
Phys Ed. 53. ....	2
Math 12 .....	5
Zoology 51 .....	4
Air Science (optional) ....	2

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 Total Hrs. .... 17
**Junior Year****Autumn**

Religion .....	2
English (elective) .....	3
Phys. Ed. 141 .....	5
Psychology 139 .....	3
Physics 31 .....	5

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 Total Hrs. .... 18
**Winter**

Religion .....	2
Phys Ed. 143 .....	3
Phys Ed. 146 .....	3
Physics 32 .....	5
Psychology 121 .....	5

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 Total Hrs. .... 18
**Spring**

Religion .....	2
English (elective) .....	3
Phys Ed. 140 .....	3
Phys. Ed. 133 .....	3
Phys Ed. 154 .....	5
Electives .....	2

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 Total Hrs. .... 18
**FOUR-YEAR COURSE OF STUDY FOR****MAJORS IN PHYSICAL EDUCATION**

Following this outline will aid the student to meet all group, departmental, and university requirements for graduation, and will also meet all requirements for state certification.

**Freshman Year****Autumn**

English 1 .....	3
Religious Education .....	2
Physical Ed. 51 (Men) ....	2
Health 21 (Bacteriology) ..	4
Phys. 7d. 81a (Women) ..	1
Air Science (Men)** .....	2
Minor or Elective .....	3 to 5

**Winter**

English 2 .....	3
Religious Education .....	2
Physical Ed. 52 (Men) ....	2

Sociology 11 (or minor) ..	5
Zoology 11 .....	5
Phys. Ed. 81b (Women) ..	1
Air Science (Men)** .....	2

**Spring**

English 3 .....	3
Religious Education .....	2
Physical Ed. 53 (Men) ....	2
Chemistry 1 .....	3
Health 1 .....	1
History 70 .....	5
Phys. Ed. 81c (Women) ..	1
Air Science (Men)** .....	2



**Sophomore Year**

**Autumn**

English 4 .....	3
Religious Education .....	2
Physical Ed. 54 (Men) .....	2
Phys. Ed. 51 or 54* (Women) .....	2
Psychology 11 .....	5
Phys. Ed. 87 (Women) ....	1
Phys. Ed. 83a (Women) ..	1
Air Science (Men) .....	2
Educ. Values 30 .....	1
Geology 1 .....	5

**Winter**

English .....	2
Religious Education .....	2
Physical Ed. 55 (Men) .....	2
Phys. Ed. 52 or 55* (Women) .....	2
Health 45 (Zoology 45) ..	5
Physics 1 .....	3
Phys. Ed. 88 .....	1
Recreation 80 .....	1
Phys. Ed. 83b (Women) ..	1
Air Science (Men) .....	2

**Spring**

English .....	2
Religious Education .....	2
Physical Ed. 56 (Men) .....	2
Phys. Ed. 53 or 56* (Women) .....	2
Phys. Ed. 89 .....	1
Phys. Ed. 83c (Women) ..	1
Air Science (Men) .....	2
Health 50 (Foods) .....	3
Recreation 131 .....	3

**Senior Year**

**Autumn**

Religious Education .....	2
Health 195 .....	2
Health 158 .....	3
Sec. Inst. 138 .....	5
Minor and Elective .....	3-5

**Winter**

Religious Education .....	2
Phys. Ed. 154 .....	5
Sec. Inst. 139 .....	7
Minor or Electives .....	2

**Spring**

Religious Education .....	2
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**Junior Year**

**Autumn**

English .....	2
Religious Education .....	2
Phys. Ed. 101 (Men) .....	2
Phys. Ed. 141 .....	3
Educational Adm. 100 ....	3
Educational Psych. 100 ....	5
Minor or Elective (Men) 1-2	
Phys. Ed. 120 (Women) ....	2

**Winter**

Religious Education .....	2
Phys. Ed. 130 .....	3
Phys. Ed. 146 .....	3
Phys. Ed. 102 (Men) .....	2
Ed. Val. 100 or 115 or 116	3
Sociology 164 .....	2
Minor or Elective .....	2-4

**Spring**

Religious Education .....	2
Phys. Ed. 140 .....	3
Phys. Ed. 103 (Men) .....	2
Phys. Ed. 104 (Men) .....	2
Sec. Inst. 120 .....	4
Social Science .....	5
Phys. Ed. 121 (Women) ....	2

Phys. Ed. 133*** .....	3
Minor and Elective .....	10

\*Any of these courses not completed in the sophomore year should be taken in the junior or senior year.

\*\*Majors desiring Military Training will take Air Science courses as indicated.

\*\*\*The following courses may be used for substitutes upon recommendation of the department: Phys. Ed. 134, 142, 175, 230, 236, 247, 255.

### Lower Division Courses for Men

- 1, 2, 3. **Physical Education Activities.** (1-1-1) A.W.S. Staff  
These courses will include games, and a variety of athletic and gymnastic activities.
4. **Indoor Track and Field.** (1) W. Robison
10. **Basketball.** (1) A.W.S. Three periods each week. Soffe
11. **Volley Ball.** (1) A.W.S. Three periods each week. Bangerter
12. **Badminton.** (1) A.W.S. Three periods each week. F. W. Dixon
13. **Handball.** (1) A.W.S. Three periods each week. Soffe
17. **Boxing.** (1) A.W.S. Three periods each week. Soffe
18. **Wrestling.** (1) A.W.S. Three periods each week. Nilson
20. **Intermediate Basketball.** (1) W. Daily. Prerequisite: Physical Education 10 or equivalent. Watts
27. **Intermediate Boxing.** (1) W.S. Three periods each week. Prerequisite: Phys. Ed. 17 or equivalent. Soffe
28. **Intermediate Wrestling.** (1) A.W.S. Three periods each week. Prerequisite: Phys. Ed. 18 or equivalent Nilson
30. **Golf.** (1) A.S. Two two-hour periods each week. Provo Municipal Golf Course. Fee. F. W. Dixon
31. **Tennis.** (1) A.S. Three periods each week. F. W. Dixon
32. **Skiing.** (1) W. Fee. Holbrook, Cowan, Jensen  
First year skiing for participants of varying abilities. Sections will be formed and instruction will be given in the fundamentals of climbing, touring, downhill and slalom. (Permission to withdraw with refund restricted.)
36. **Softball.** (1) S. Three periods each week. (Not given this year.) Staff
37. **Football—Freshmen.** (1) A. Daily. O. Dixon  
This course will be limited to those qualifying for the freshman football squad.
38. **Track and Field—Freshmen.** (1) S. Daily. Robison  
This course is open to those qualifying for the freshman track and field squad.
39. **Baseball—Freshmen.** (1) S. Crowton  
Limited to those qualifying for freshman baseball squad.
40. **Intermediate Golf.** (1) A.S. Two periods each week. Provo Municipal Golf Course. Special fee. Prerequisite: Phys. Ed. 30 or equivalent. F. W. Dixon
41. **Intermediate Tennis.** (1) A.S. Daily. Prerequisite: Phys. Ed. 31 or equivalent. F. W. Dixon

- 42. Second Year Skiing.** (1) W. Cowan, Holbrook, Jensen  
Second year skiing for participants of varying ability. Classification for instruction will be based upon ability. Fee. (Permission to withdraw with refund restricted.)
- 46. Archery.** (1) A.S. Webb  
Individual techniques with experience in various types of tournaments and related archery activities. Students will furnish their own arrows.
- 51. Skills and Techniques (for majors).** (2) A. Five periods each week. Bangerter  
Speedball, touch football, soccer, and tumbling.
- 52. Skills and techniques (for majors).** (2) W. Five periods each week. Special fee for Bowling. Bangerter  
Boxing, bowling, and wrestling.
- 53. Skills and Techniques (for majors).** (2) S. Five periods each week. Special fee for Swimming. Bangerter  
Swimming, diving, football, gymnastics, weight training, and body building.
- 54. Skills and Techniques (for majors).** (2) A. Five periods each week. Soffe, F. W. Dixon  
Tennis, volley ball, squash.
- 55. Skills and Techniques (for majors).** (2) W. Five periods each week. Soffe, F. W. Dixon  
Badminton, basketball, and handball.
- 56. Skills and Techniques (for majors).** (2) S. Five periods each week. Special fee for Golf. Soffe, Robison  
Games and relays, softball, track and field, and golf.
- 60. Elementary Swimming.** (1) S. Fee. (Permission to withdraw with refund restricted.) Two periods each week. Staff
- 61. Intermediate Swimming.** (1) S. Fee (Permission to withdraw with refund restricted.) Two periods each week. Staff
- 64. Life Saving.** (1) S. Fee. Cowan  
American Red Cross life saving course. (Permission to withdraw with refund restricted.)
- 65. Water Safety Instruction.** (1) S. Fee. Cowan  
American Red Cross water safety instructors' course. Prerequisite: Physical Education 64 or equivalent. (Permission to withdraw with refund restricted.)
- 66. Canoeing.** (1) S. Fee Holbrook, Cowan  
Provides instruction in canoeing techniques on the many and varied waterways of Utah County. American Red Cross Basic Canoeing Cards and Canoeing Instructor Cards are issued to those students who qualify. Prerequisite: ability to pass swimming test or the holding of an intermediate or Life Saving Card. Permission to withdraw with refund restricted.

- 70. Beginning Tumbling, Trampoline, Stunts, and Balancing.** (1) A.W.S. Three periods each week. Bangerter
- 72. Trampoline and Gymnastic Apparatus.** (1) A.W.S. Three periods each week. Bangerter  
Basic instruction is given in gymnastic and free exercises; techniques are taught in use of parallel and horizontal bars, flying rings, side horse, and trampoline.
- 73. Intermediate Trampoline and Gymnastic Apparatus..** (1) W.S. Prerequisite: Pyhs. Ed. 72 or equivalent. Bangerter
- 76. Weight Training and Body Building.** (1) A.W.S. Soffe
- 87. Tap Dance.** (1) A.W.S. Jensen  
Fundamental and basic tap rhythms progressing into routines for various tempo music.
- 88. Folk Dance.** (1) A.W.S. Holbrook, Jensen  
Dances of foreign countries.
- 89. American Square Dance.** (1) A.W.S. Three periods each week. Heaton  
Square and round dances of the United States and dances of the Americas.

#### Lower Division Courses for Women

- 10. Basketball.** (1) A.W. Webb
- 11. Volley Ball.** (1) A.W.S. Peterson
- 12. Badminton.** (1) A.W.S. Webb, Peterson
- 20. Intermediate Basketball.** (1) A.W. Webb, Cowan
- 30. Golf.** (1) A.S. Two two-hour periods per week. Provo Municipal Golf Course. Fee. F. W. Dixon  
Students will be required to furnish their own equipment.
- 31. Tennis.** (1) A.S. Three periods each week. F. W. Dixon  
Limited to 24 students per class.
- 32. Skiing.** (1) W. Fee. Holbrook, Cowan, Jensen  
First year skiing for participants of varying abilities. Sections will be formed according to participants abilities and instruction will be given in the fundamentals of climbing, touring, downhill, and slalom. (Permission to withdraw with refund restricted.)
- 33. Field Sports.** (1) A. Daily for thirty-three class periods. Webb  
Soccer, speedball, and hockey will be taught. The class meets outdoors daily on all the days of good weather.
- 35. Hockey.** (1) A. Daily for thirty-three class periods. Webb
- 36. Softball.** (1) A.S. Daily for thirty-three class periods. Webb

- 41. Intermediate Tennis.** (1) A.S. Three periods each week. Pre-requisite: Physical Education 31. F. W. Dixon
- 42. Second Year Skiing.** (1) W. Cowan, Holbrook, Jensen  
Second year skiing for participants of varying ability. Classification for instruction will be based upon ability. Fee. (Permission to withdraw with refund restricted.)
- 44. Outdoor Experience through Organized Hiking.** (1) S. Saturday. Fee. Webb  
Hikes will be taken in the canyons and mountains of the vicinity. Short hikes are planned for the beginning of the quarter, and longer, more strenuous climbs will be taken at the end of the quarter.
- 45. Horseback Riding.** (1) A.S. Fee. Holbrook  
Individual and group instruction in riding with a development in the techniques and with instruction in the "aids." Correct handling of horses, and the development of gait will be taught. Progress will be graded from the beginning phases of horseback riding. Men may register for this course as "Recreation 45." (Permission to withdraw with refund restricted.)
- 46. Archery.** (1) A.S. Daily for thirty-three class periods. Webb  
Individual techniques, with experience in various types of tournaments and related archery activities. Students will furnish their own arrows.
- 48. Recreational Sports.** (1) A.W.S. Peterson  
Individual, dual, and small group games and sports of a recreational sort will be developed. Selection will be made from this list: bowling, archery, canoeing, riding, quoits, shuffle board, handball, and others.
- 51. Skills and Techniques (for majors).** (2) (Not given this year.) Three two-hour periods each week. Cowan  
Soccer, speedball, and body mechanics.
- 52. Skills and Techniques (for majors).** (2) (Not given this year.) Three two-hour periods each week. Cowan  
Marching, gymnastics, volley ball, and tumbling.
- 53. Skills and Techniques (for majors).** (2) (Not given this year.) Three two-hour periods each week. Cowan  
Group games and relays, outdoor games, track and field, golf, and softball.
- 54. Skills and Techniques (for majors).** (2) A. Three two-hour periods each week. Cowan  
Hockey, badminton, tennis, practice and tests in activities calling for coordination, balance, flexibility, agility, and timing.
- 55. Skills and Techniques (for majors).** (2) W. Three two-hour periods each week. Cowan  
Basketball, rope jumping, and recreational games.

56. **Skills and Techniques (for majors).** (2) S. Three two-hour periods each week. Cowan  
Recreational sports, swimming, archery, and golf.
60. **Elementary Swimming.** (1) S. Fee (Permission to withdraw with refund restricted.) Cowan, Webb
61. **Intermediate Swimming.** (1) S. Fee (Permission to withdraw with refund restricted.) Cowan
64. **Life Saving.** (1) S. Fee. Cowan  
American Red Cross life saving course. (Permission to withdraw with refund restricted.)
65. **Water Safety Instruction.** (1) S. Fee. Cowan  
American Red Cross water safety instructors' course. Prerequisite: Physical Education 64 or equivalent. (Permission to withdraw with refund restricted.)
66. **Canoeing.** (1) S. Fee Holbrook, Cowan  
Provides instruction in canoeing techniques on the many and varied waterways of Utah County. American Red Cross Basic Canoeing Cards and Canoeing Instructor cards are issued to those students who qualify. Prerequisite: ability to pass swimming test or the holding of an intermediate or Life Saving Card. (Permission to withdraw with refund restricted.)
70. **Tumbling.** (1) A.W.S. Cowan, Jensen  
Simple tumbling events in keeping with beginner's ability will be taught as foundation work. Other items will be given to develop skill and coordination for the fun and satisfaction of the performers.
72. **Gymnastics and Body Mechanics.** (1) A.W.S. Peterson
73. **Game and Conditioning Activities.** (1) A.W.S. Webb, Peterson
- 81a, 81b, 81c. **Modern Dance Technique—Beginning.** (1-1-1) A.W.S. Shilling  
Progressive fundamental movement techniques. These include axial and locomotor movements with their variations. Combinations of the foregoing are developed with influencing factors such as levels, focus, direction, and expressive qualities. These courses are continuous.
- 83a, 83b, 83c. **Dance Composition—Beginning** (1-1-1) A.W.S. Shilling  
Prerequisite: Have had or currently taking Physical Education 81a, 81b, 81c.  
Progressive fundamental compositional techniques.
87. **Tap Dancing.** (1) A.W. Two periods each week. Jensen  
Simple routine and rhythms will be taught and worked out to old-time and modern music. Emphasis will be placed upon the recreative rather than the professional aspects of the activity.

88. Folk and Country Dancing. (1) W. Holbrook, Webb

89. American Square Dancing. (1) A.W.S. Heaton, Jensen

**Upper Division Courses for Men and Women**  
(Professional)

101. Athletic Coaching and Directing—Football (2) A. Atkinson  
Fundamentals of the game, methods of working out plays, systems of offense and defense and conditioning of teams, etc.

102. Athletic Coaching and Directing—Basketball (2) W. Watts  
Fundamentals of offensive and defensive systems, schedule making, etc.

103. Athletic Coaching and Directing—Track and Field. (2) S. Robison  
Techniques of track and field athletics with emphasis upon the management of meets.

104. Coaching—Baseball. (2) S. Crowton  
Problems and duties of the baseball coach, including a study of individual techniques and team tactics, rules and training.

106. Officiating Football. (1) A. Watts  
Rules, techniques, problems, and procedures in officiating football.

107. Officiating Basketball. (1) W. Watts  
Rules, techniques, problems and procedure in officiating basketball.

120. Games for Elementary Teachers. (2) A.W.S. Cowan  
Required of all elementary teachers.

121. Rhythms for Elementary Teachers. (2) A.W.S. Holbrook  
Required of all elementary teachers.

\*130. Principles of Physical Education. (3) W. Holbrook  
Philosophy and principles underlying physical education for a general comprehension and unified view.

\*133. Administration of Physical Education, Health, and Recreation. (3) S. Soffe  
The executive and administrative problems arising out of organizing and conducting health, physical education, and recreation programs in schools and communities.

134. Intramural Sports—Organization and Administration. (2) W. Hafen  
Procedures concerning organization, administration, and supervision of the intramural program. Includes utilization of time and space of leadership organization; organization of pupils into effective competitive groups; and the necessary routine procedure for effective administration.

**140. Physiology of Activity. (3) S. Prerequisite: Zoology 45.**

Barney  
A study of the processes which occur in the body during exercise. Special attention will be given to the effects of exercise upon circulation, respiration, and metabolism.

**141. General Kinesiology. (3) A. Prerequisite: Zoology 45. Barney**

The anatomy of the human body with emphasis upon the study of bones, joints, muscles, and their action. Athletic exercise will be studied, with reference to its effect upon the body.

**\*142. Physical Inspection. (2) S.**

Williams

Teaching the student ways of recognizing abnormalities of body function by inspection and testing procedures.

**143. Problems in Athletic Conditioning and Injuries. (3) W.**

Barney

**\*146. Adaptation of Activities in Corrective Procedure. (3) W.**

Prerequisites: Zoology 45; Physical Education 141. Dixon

Variations of posture, the mechanics of balancing of the forces in the body, psychology of individual gymnastics, methods of stimulating interest in posture, and the selection and scope of corrective activities.

**\*154. Introduction to Tests in Physical Education. (5) W. Hart**

A background course in physical achievement tests. The history of the development, together with an analysis of outstanding tests in physical education and statistical procedures used in analyzing tests.

**\*172. Driver Education and Training for High School Teachers. (2)**

S. Two periods each week. Fee.

Bangerter

This course is designed to qualify high school teachers and instructors in driver education and behind-the-wheel training. (See Secondary Education 172.)

**\*175. Safety Procedures in Physical Education and Recreation. (2)**

W.

Bangerter

Presents the incidence of accidents in physical education and recreation; the nature of these injuries; and the cause of such accidents. The treatment of the injuries and the procedure for their prevention are discussed.

**180. Specialty Dance. (1) A.W.S. Prerequisite: Physical Education**

81a, 81b, 81c or equivalent.

Shilling

**181a, 181b, 181c. Dance Techniques—Advanced. (1-1-1) A.W.S.**

Shilling

**183a, 183b, 183c. Problems in Teaching Dance. (1-1-1) A.W.S.**

Shilling

Analysis of methods with directed application as assistants and demonstrators in dance classes.

**184a, 184b, 184c. Concert Dance. (1-1-1) A.W.S. Shilling**

Performance techniques and composition for modern dance.



- 185a, 185b, 185c. Percussion Accompaniment. (1-1-1) A.W.S.  
Shilling  
A study of rhythmic fundamentals with emphasis upon various types of instruments.
- 186a, 186b. Piano Improvisation for Dance. (1-1) W.S. Pre-requisite: A fundamental skill at the keyboard, or Physical Education 185a, 185b, 185c. Shilling
187. Philosophy and Principles of Dance. (2) A. Shilling
188. History of Dance. (3) S. Shilling
189. Dance Production. (2) W. Shilling  
Research in problems for dance concerts. Suggestions for costumes, choreography, and accompaniment are to be considered.
- \*196. Rehabilitation. (3) S. Barney  
Reviews the various types of physical malformations which can be corrected or benefited by corrective physical education. Examples of physical malformation, such as spastics, polio-cripples, and others, will be studied in the laboratory.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry only graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

230. Administration of Community and School Recreation. (3) S. Holbrook
235. History and Philosophy of Physical Education. (5) W. Holbrook
247. Principles and Practices of Physical Reconditioning. (3) A. Prerequisites: 141, 146, and Health 45, or equivalent. F. W. Dixon
255. Advanced Tests and Measurements in Physical and Health Education. (3) W. Prerequisite: 154 or equivalent. Hart
263. Curriculum Construction and Current Problems. (5) S. Hart
292. Research in Recreation, Physical and Health Education. (5) A. Hart
294. Readings in Physical Education. (2) A.W.S. Staff
300. Thesis for Master's Degree. Staff
301. Field Project. Staff

## Physics

Professors: W. Hales (chairman, 280 ESC), H. J. Fletcher, Marshall.

Associate Professors: Eastmond, Gardner\*.

Assistant Professors: Aamodt, Geertsen, R. Hales, Hoyt, Miller.

Instructors: Boel, Oak.

Students majoring in physics have the following courses prescribed: Physics 41, 42, 43, 121, 122, 123, 195, 196, 197; and at least fifteen or more hours of additional courses selected from the upper division courses in the department.

Students who expect to study engineering or physical sciences should begin their study of physics by electing courses 41, 42, 43. Students who expect to study medicine or major in the fields of biological science should begin their study of physics by electing courses 31, 32, 33.

Non-science students may elect with profit courses 1, 2, 16, 21, 26, and 27, which may be taken without prerequisite and which are organized with the view of giving the student an appreciation of his physical environment. Physics 27 is not recognized as fulfilling the general education requirement in physical science.

Physics is one of the subjects comprising the composite major in mathematics and the physical sciences designed for prospective teachers.

For Acoustical Engineering, Electrical Engineering, Mechanical Engineering, see Department of Engineering Sciences.

**Entrance Requirements.** It is intended that a student intending to major in physics shall have met the general entrance requirements of the College of Physical and Engineering Sciences, as stated on page 405 of this catalog.

### Suggested Courses for Physics Major

In order to satisfy the general education requirements and at the same time obtain sufficient work in undergraduate physics to make the pursuit of graduate work profitable, the physics major must plan his program carefully.

For physics majors the following program is recommended for the first two years:

First Year	A	W	S	Second Year	A	W	S
*Math 15, 16, 17 ....	5	5	5	*Math 98, 99, 100 ..	5	5	5
Chemistry 14, 15, 16	5	5	5	Physics 41, 42, 43 ....	5	5	5
English 1, 2, 3 .....	3	3	3	Religion .....	2	2	2
Religion .....	4	..	2	Language or			
Phys. Ed. ....	1	1	1	electives .....	5	5	5
Health 1 .....	..	..	1				
Electives .....	..	5	..				
				Total .....	17	17	17
Total .....	18	19	17				

\*The series Math 11, 12, 13, 91, 92, 93, 111, 112 might be substituted for the mathematics courses suggested above. If the student finds it necessary to take Math 1, he should follow it with Math 11 and 12 winter quarter of the first year.

During the junior and senior years courses should include all or most of those listed in the following sample program. Electronics (E.E. 161, 162, 163) is recommended for programs with experimental emphasis and could be substituted for one of the starred courses. If this is done, Physics 141, 142, 143 should be shifted to the third year and suitable adjustment made in the program. Students pursuing specialized or terminal courses in physics can substitute for the starred courses those more suitable to their particular program.

Third Year	A	W	S	Fourth Year	A	W	S
Physics 121, 122, 123	4	4	4	*Math 191, 192, 193	3	3	3
*Physics 111, 112,				Physics 141, 142,			
113 .....	3	3	3	143 .....	5	5	5
Math 113 .....	..	..	3	*Physics 151, 152			
*Physics 171, 172,				153 .....	3	3	3
173 .....	2	2	2	Religion .....	2	2	2
Religion .....	2	2	2	Physics 195, 196,			
Electives .....	7	7	4	197 .....	1	1	1
				Electives .....	4	4	4
Total .....	18	18	18	Total .....	18	18	18

### Lower Division Courses

- 1, 2. **Essentials of Physics.** (3-3) A.W. (GER-PS) Eastmond  
An elementary course designed to give non-science students an orientation in the field of physics. Emphasis is placed on the basic concepts of force and motion, work and energy, heat, sound, light, and electricity governing everyday experiences in man's contact with the physical world. Either Physics 1 or Physics 2 may be taken without prerequisite.
10. **Fundamentals of Physics.** (3) A. (GER-PS) Staff  
For students in Nursing and Family Living. Essential principles of mechanics, heat, sound, light, electricity, and radiation physics presented, with applications.
16. **Descriptive Astronomy.** (3) S. (GER-PS) Eastmond  
This course is designed for those wishing a general knowledge of the facts, theories, and methods of astronomy. Frequent use will be made of the observatory.
21. **Weather and Climate.** (4) W. (GER-PS) W. Hales  
A study of the earth's atmosphere and the problems associated with climate and weather forecasting.
26. **Photography.** (4) A.S. W. Hales  
A study of the camera and its accessories, lenses and image formation, photographic laboratory arts and techniques. Two lectures and one laboratory period per week.

- 27. Photography.** (3) (Not given this year.) W. Hales  
Continuation of Physics 26 with emphasis on photographic emulsions sensitometry, toning, and color processes. Not recognized as fulfilling general education requirement in physical science. Two lectures and one laboratory period per week.
- 31. General Physics, Mechanics and Sound.** (5) A. (†GER-PS) Staff  
Prerequisites: Mathematics 11 and 12 or equivalent. Staff  
Courses 31, 32, and 33 constitute a general college course in physics. This course will satisfy the requirements of pre-medical and pre-dental students. Majors in the biological sciences will find the subject matter of these courses selected to meet their needs.
- 32. Heat and Light.** (5) W. (†GER-PS) Staff  
Continuation of Physics 31.
- 33. Electricity.** (5) S. Staff  
Continuation of Physics 32.
- 41. General Physics, Mechanics and Sound.** (5) A. (†GER-PS) Staff  
Prerequisites: Mathematics 11 and 12. Staff  
Enrollment in Mathematics 101 recommended. Courses 41, 42, and 43 constitute a general college course in physics. This general course is required of all physics majors and will satisfy the requirements in physics for physical science and engineering majors. It is a prerequisite for all the specialized courses in physics.
- 42. Heat and Light.** (5) W. (†GER-PS) Staff  
Continuation of Physics 41.
- 43. Electricity.** (5) S. Staff  
Continuation of Physics 42.

### Upper Division Courses

Prerequisites for all upper division courses in physics are Calculus and Physics 41, 42, 43.

- 111. Heat.** (3) A. R. Hales  
A study of temperature, heat transfer, and thermal properties of matter.
- 112. Thermodynamics.** (3) W. R. Hales  
A study of the laws of thermodynamics and their application to numerous physical and chemical phenomena.
- 113. Kinetic Theory.** (3) S. R. Hales  
A study of molecular motions and the transfer of mass, momentum, and energy in gases, liquids, and solids.
- 121, 122, 123. Mechanics.** (4-4-4) A.W.S. Gardner  
Fundamental principles of mechanics and their application to physical problems.

- 131. Physical Meteorology.** (3) A. W. Hales  
The physics of the earth's atmosphere. A study of the causes which produce variations in the pressure, temperature, and humidity of the air and their influence upon weather and climate.
- 132. Dynamic Meteorology.** (3) W. W. Hales  
A continuation of course 131—with special emphasis on the thermodynamics and hydrodynamics of the atmosphere.
- 133. Synoptic Meteorology.** (3) S. W. Hales  
A continuation of course 132—in which weather analysis and weather forecasting will be studied. Daily weather maps including frontal data, atmospheric cross sections, and various thermodynamic charts will be constructed as part of the laboratory work.
- 141, 142, 143. Electricity and Magnetism.** (5-5-5) A.W.S. Marshall  
Electrostatics and D.C. and A.C. circuit theory; introduction to electronics.
- 150. Introduction to Quantum Mechanics.** (3) (Not given this year.) R. Hales  
The classical background, basic ideas, and methods of quantum mechanics, with application to simple systems including the hydrogen atom.
- 151, 152, 153. Atomic and Nuclear Physics.** (3-3-3) (Not given this year.) W. Hales  
A study of the structure of the atom as revealed by X-rays, radioactivity, spectroscopy, nuclear theory, and related subjects.
- 161. Architectural Acoustics.** (5) (Not given this year.) Prerequisite: Consent of the instructor.  
Fundamental behavior of sound in rooms. Effects of shape and size upon the perception of speech and music. Proper use of public address and sound reinforcing systems, sound absorption and insulation properties of different kinds of room walls. Kinds and amounts of sound absorption materials to use in the sound treatment of rooms and auditoriums.
- 162. Psycho-Acoustics.** (5) (Not given this year.) Prerequisite: Electrical Engineering 163.  
A study of speech and hearing from a communication engineering view point. A dynamical analysis of the speech and hearing processes will be developed. The known experimental facts about speech and hearing will be systematically studied and compared with the calculated results.
- 163. Psycho-Acoustics.** (3) S. (Not given this year.) Prerequisite: Physics 162.  
Methods of calculating and measuring the articulation index of a talker-listener pair when using any specified type of communication system.

- 171, 172, 173. Experimental Optics.** (2-2-2) A.W.S. Eastmond  
Fundamental principles of geometrical and physical optics with emphasis on experiments with prisms and lenses, dispersion and spectra, interference, diffraction, and polarization.
- 181. Laboratory Arts.** (2) A. Staff  
Processes connected with the construction and use of apparatus in the physical laboratory.
- 183. Advanced Physical Measurements.** (1-3) A.W.S. Staff  
Precision measurements involving special laboratory techniques and the solution of some research problems. Required of all majors in physics in senior year.
- 187, 188, 189. Advanced Photography.** (2-2-2) A.W.S. Prerequisites: Physics 26, 41, 42, 43, and general chemistry.  
W. Hales  
A laboratory course in the more advanced photographic principles, including sensitometry, physical development, toning, natural color, printing, etc.
- 191. Readings in Modern Physics.** (1-3) A.W.S. Staff  
A reading course designed to acquaint the student with new material which may not have been included in the regular courses.
- 195, 196, 197. Seminar.** (1-1-1) A.W.S. R. Hales  
A survey of the physical theories and topics in modern research. A course for seniors in which the student is aided in integrating the specialized courses.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

- 201, 202, 203. Nuclear Physics.** (2-2-2) (Not given this year.)  
R. Hales
- 205, 206, 207. Introduction to Theoretical Physics.** (3-3-3) A.W.S.  
W. Hales
- 211. Advanced Mechanics.** (3) (Not given this year.) Gardner
- 212. Dynamics.** (3) (Not given this year.) Gardner
- 213. Theory of Relativity.** (3) (Not given this year.) Gardner
- 231, 232, 233. Atomic Physics and Spectroscopy.** (3-3-3) A.W.S.  
Eastmond
- 237, 238, 239. Molecular Physics and Microwave Spectroscopy.** (3-3-3) (Not given this year.) Prerequisite: Permission of the instructor.  
Aamodt

- 241, 242, 243. Mathematical Theory of Electricity and Magnetism. (3-3-3) (Not given this year.) Gardner
- 251, 252, 253. Quantum Mechanics. (3-3-3) A.W.S. Gardner
- 261, 262, 263. Fundamentals of Acoustics. (3-3-3) (Not given this year.) Prerequisite: Electrical Engineering 163. Fletcher
- 264, 265, 266. Acoustical Measurements. (2-2-2) (Not given this year.) Prerequisites: Physics 261, 262, 263. Staff
- 267, 268, 269. Advanced Musical Acoustics. (2-2-2) A.W.S. Prerequisite: Consent of instructor. (Not given this year.)
291. Readings in Modern Physics. (1-3) A.W.S. Marshall,  
W. Hales, Eastmond, Gardner, R. Hales
- 292, 293, 294. Classical Experiments. (2-2-2) A.W.S. Marshall,  
W. Hales, Eastmond, Gardner, R. Hales
- 295, 296, 297. Seminar. (1-1-1) R. Hales
300. Thesis for Master's Degree. Staff

## Political Science

Professors: Jensen (emeritus), Pond, R. B. Swensen.

Associate Professors: Poll (chairman, 254 McK), Caldwell, Grow.

Assistant Professors: Carr, Hunt, Reeder.

Instructors: M. W. Cannon, Fielding, Fisher, Jones, Riggs.

### REQUIREMENTS FOR A MAJOR IN POLITICAL SCIENCE

Upper division courses in this department are generally arranged in six main areas of study: I. Political Theory, II. Politics, III. Public Administration, IV. Comparative Government, V. International Law and Relations, and VI. Public Law.

A major in Political Science requires the satisfactory completion of at least 45 hours of work in this field, distributed as follows:

Required courses: Political Science 10, 11, 12 or 15, 101, 190.

Elective courses: Twenty-five hours, including at least one course from each of the six main areas of upper division work, selected in consultation with the Political Science Department.

It is recommended that the major in Political Science include History 20 and 21 in his basic program.

Political Science 10, 11, and 12 or 15 should be completed by the end of the sophomore year. Courses and sequences other than those required should be selected in consultation with the department chairman, who will advise the student also in the selection of his minor field.

Political Science is designated as a "composite major" in social science. (See College of Education.)

### AMERICAN HISTORY AND GOVERNMENT REQUIREMENT

In satisfying this requirement for graduation, the major student in Political Science is advised to offer one of the following combinations:

Political Science 10 and History 20.

Political Science 10 and History 21.

Political Science 10 and History 74.

History 70 and History 80 are not recommended for majors in Political Science as the means of fulfilling this graduation requirement.

### Lower Division Courses

1. **Introduction to Political Science.** (5) A. (GER-SS) Riggs  
An exploratory course designed to acquaint students with the whole field of political science: theory, politics, public administration, comparative government, international law and relations, and public law.



10. **American Government.** (5) A.W.S. (GER-SS) Staff  
Historical development of American national government; origin and growth of the constitution; constitutional rights of the citizens; a detailed study of the executive, legislative, and judicial departments of the national government.
11. **State and Local Governments.** (5) A.W.S. (GER-SS) Staff  
Nature of the federal government; evolution of states from territories; place of the states in the nation; legislative and judicial branches of state government; the types of municipal government and their relative values.
12. **Foreign Governments.** (5) A.W. (GER-SS) Caldwell, Carr  
General study of selected European, Asiatic, and Latin-American governments; their development, organization, administration, and politics.
13. **Current Affairs.** (2) A.W.S. Poll  
A survey of current events with special attention to historical background and present implications in economics, sociology, politics, and international relations. (See History 5.)
15. **Introduction to International Relations.** (5) W.S. (GER-SS) Riggs  
A survey of the basic principles, laws, practices, and institutions which are involved in the relations of nations, pointed toward an understanding of contemporary international problems and developments.

### Upper Division Courses

#### I. Political Theory:

104. **The Development of Political Thought.** (4) A. Caldwell  
The history of political thought: Socrates, Plato, Aristotle, Epicureans, Cynics, Stoics, Cicero; early and medieval Christian thinkers, Machiavelli, Hobbes and others, to Locke.
105. **Modern European Political Thought.** (4) W.S. Caldwell  
Modern and contemporary political thought, including the development and criticism of liberal, socialist, communist, fascist, and conservative doctrines.
106. **American Political Thought.** (3) S. Jensen  
American political ideas from the colonial period to the present, with an analysis of their influence upon the development of American history and government. (See History 176.)
107. **Free Enterprise, Its Critics and Defenders.** (3) S. Cannon  
A consideration of (1) the political and ethical implications, (2) the economic implications, and (3) the historic role of such figures as Adam Smith, Ricardo, Marx, Schumpeter, and Keynes, focusing on views of the proper role of the government in the economy.
181. **Jurisprudence.** (3) (Not given this year.) Caldwell  
(See description under VI.)

**II. Politics:**

- 110. Political Parties in the U.S.** (3) A. Grow  
Organization and methods of action of political systems in the United States.
- 115. Public Opinion and Propaganda.** (3) W. Grow  
Trends of public opinion and the techniques which have been instrumental in shaping it.
- 116. American Legislative System.** (3) S. Grow  
Structure and organization of congressional, state, city, legislative bodies, nature of business transacted; influences acting upon such bodies.

**III. Public Administration:**

- 130. Introduction to Public Administration.** (5) A.W. Grow, Jones  
Relationship of administration to other branches of government; types of control over administration; central and local government.
- 131. Personnel Administration.** (3) A. Jones  
A treatment of the processes, procedures, controls, and problems of personnel administration in the executive branches of federal, state, and local governments.
- 132. Comparative Public Administration.** (3) W. Cannon  
A study of the forms and techniques of public administration in several representative countries and under various types of government.
- 133. Municipal Government and Administration.** (3) W. Grow  
Growth, development, and organization of cities in the United States; relation of city and state governments; problems, activities of modern American cities: traffic, city planning, zoning, police, health, fire protection, finance.
- 134. Administration of American Foreign Policy.** (3) S. Grow  
The organizations administering U. S. foreign policy. Special emphasis on structure and function of the State Department and the foreign service, the role of Congress in foreign relations.
- 135. Government and Business.** (3) A. Cannon  
General survey of governmental activities affecting business. The political, economic and legal bases of governmental regulation, and the probable limits and difficulties inherent in our existing economic system in applying such regulation.
- 137. Government Finance.** (5) W. Pond  
(See Economics 167.)
- 183. Administrative Law of the U. S.** (3) A. Reeder  
(See description under VI.)

**IV. Comparative Government:**

- 140. Government of Scandinavia and Northern Europe.** (3) (Not given this year.) Carr  
Development of democratic parliamentary political institutions in Denmark, Norway, Sweden, Finland, and Germany, with special emphasis upon governmental structure and social services.
- 144. Government of the Soviet Union.** (3) S. Carr  
Political heritage of Russia under the Czars; development of the Russian Socialist state and its political institutions, with reference to Marxist political ideology and its deviations under Lenin and Stalin.
- 145. English Government and Politics.** (3) W. Carr  
Development of the English Constitution; examination of the growth of cabinet government, the Crown, Parliament, Civil Service; local government and administration; the English judicial system.
- 146. Governments of the British Commonwealth.** (3) (Not given this year.) Carr  
Development of colonial and dominion status; governments of Canada, Australia, New Zealand, South Africa, with some attention to recent developments in the Far Eastern Dominions.
- 147. History and Government of Canada.** (3) (Not given this year.) Grow  
(See History 148.)
- 148. Governments of the Far East.** (3) W. Carr  
Survey of the growth and development of independence in the new nations of the Far East; the social, economic, and political progress to date of China, Japan, Korea, the Philippine Republic, and the Republic of Indonesia.
- 149. Governments of Latin-America.** (3) (Not given this year.) Hunt  
Growth and political development of countries in the Latin-American area, with special reference to Argentina, Brazil, and Mexico.

**V. International Law and Relations:**

- 169. International Organization.** (3) S. Carr  
History and structure of international organizations, with particular emphasis on the United Nations organization and its specialized agencies.
- 170. International Relations.** (5) A. Carr  
International relations in the contemporary world. Development of the modern state system, problems of international relations, and the emergence of international law and government.

171. **Foundations of National Power (The Americas).** (3) A. Fisher

An analysis of the Western hemisphere in terms of these elements of power: geography, natural resources, relations among the American nations, demography, and relations between the hemisphere and other portions of the world.

172. **Foundations of National Power (Europe).** (3) W. Fisher

An analysis of the European continent in terms of these elements of power: geography, natural resources, relations among the European nations, demography, and relations between Europe and other portions of the world.

173. **Foundations of National Power (Near and Middle East.)** (3) S. Reeder

An analysis of the Near and Middle East from the perspective of geography, natural resources, population, politics, international relations.

174. **Pacific Area.** (3) (Not given this year.) Carr

Historical development of political, economic, and colonial problems of the countries of the Pacific Basin, particularly those influenced by European and American expansion; modern international claims and rivalries.

175. **Development of American Foreign Policy.** (3) S. Fielding

The role of the United States in international affairs from colonial times to the present. Emphasis will be placed upon the diplomacy of expansion, the Monroe Doctrine, and problems of the 20th century. (See History 184.)

177. **Contemporary Problems.** (3) A.W.S. Poll

Survey of current events with special attention to the historical background and present implications in economics, sociology, politics, and international relations. (See History 185.)

178. **International Relations of the Far East.** (3) S. Carr

Development of international intercourse between the countries of the Far East and the Occident during the Nineteenth and Twentieth centuries.

179. **International Law. I.** (3) W. Reeder

Nature and function of international law; recognition, succession, jurisdiction, rights, and immunities of states; nationality and jurisdiction over nationals.

180. **International Law. II.** (3) S. Reeder

Jurisdiction over aliens; international responsibilities, status, and immunities of diplomatic officials; treaties; legal regulation of the use of force.

## VI. Public Law:

- 179 **International Law. I.** (3) W. Reeder  
(See description under V.)

- 180. International Law. II. (3) S.** Reeder  
(See description under V.)
- 181. Jurisprudence. (3) (Not given this year.)** Caldwell  
Consideration of law, legal systems, and fundamental concepts; contributions and influences of modern schools of legal philosophy.
- 182. Introduction to Anglo-American Legal Institutions. (5) S.** Caldwell  
The origins and development of common law and equity, the writ system, English and American court systems, basic legal terms, the anatomy of a law suit.
- 183. Administrative Law of the U. S. (3) A.** Reeder  
Legal setting for administrative bodies and judicial control of administrative action. Cases in administrative law read and discussed.
- 185. American Constitutional Development. (3) W.** Prerequisite: Political Science 10. Jensen  
History and development of the Constitution of the United States; a study of its fundamental provisions, their interpretation and application in the functioning of the American system of government. (See History 175.)
- 186. Constitutional Law of the U.S. I. (5) A.** Prerequisite: Political Science 10. Reeder  
The American federal system.
- 187. Constitutional Law of the U.S. II. (5) W.** Prerequisite: Political Science 10. Reeder  
Fundamental rights and immunities.

#### Other Courses:

- 101. Bibliography and Research in Political Science. (3) A.W.** Caldwell  
Sources, materials, and methods of research in political science; government documents: national, state, international organization. Required for all majors in political science.
- 190. Senior Seminar. (2) A.W.S.** Grow, Caldwell, Riggs  
Research seminar required of all majors in political science.
- 198. Directed Readings in Political Science (1-2) A.W.S.** Staff

#### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

**I. Political Theory:**

201. The Authoritarian Tradition. (3) A. Caldwell  
 202. Modern Political Ideas. (3) (Not given this year.) Caldwell  
 203. Roots of the American Democracy. (3) (Not given this year.) Caldwell  
 204. Development of Modern Constitutions. (3) (Not given this year.) Carr

**II. Politics:**

210. American Political Problems. (3) A. Grow  
 215. Public Opinion and Political Behavior. (3) (Not given this year.) Reeder  
 220. American Legislative Processes. (3) W. Grow

**III. Public Administration:**

230. Comparative Public Administration. (3) (Not given this year.) Grow  
 232. State and Municipal Administration. (3) A. Jones

**IV. Comparative Government:**

240. Modern Democratic Government. (3) A. Carr  
 241. Development of Totalitarian Government. (3) W. Carr

**V. International Law and Relations:**

268. Theories of International Relations. (3) (Not given this year.) Carr  
 269. International Organization in 20th Century. (3) W. Riggs  
 270. International Relations in 20th Century. (3) S. Riggs  
 280. Modern International Law. (3) (Not given this year.) Reeder

**VI. Public Law:**

281. Analysis of Modern International Law. (3) (Not given this year.) Reeder  
 286. Constitutional Law in 20th Century. (3) S. Reeder  
 288. Supreme Court of the U.S. (3) (Not given this year.) Caldwell

**Other Courses:**

298. Directed Readings in Political Science. (1-2) A.W.S. Staff  
 300. Thesis for Master's Degree. (4-6) A.W.S. Staff

## Portuguese

(See courses in Modern and Classical Languages.)

## Poultry Husbandry

(See courses in Animal Husbandry.)

## Pre-Dental

(See College of Biological and Agricultural Sciences.)

## Pre-Legal

(See College of Humanities and Physical Sciences.)

## Pre-Medical

(See College of Biological and Agricultural Sciences.)

## Pre-Physical Therapy

(See courses in Physical Education.)

## Pre-Veterinary

(See College of Biological and Agricultural Sciences.)

## Psychology

Professors: Allen (chairman, 366 McK), Poulson (emeritus).

Assistant Professors: Howell, R. M. Peterson, C. Taylor.

Instructors: Hardy, Moffitt.

The science of psychology has a place in the general education of everyone in his search for an understanding of himself and others. It concerns itself with such questions as: How does man experience and react to the world around him? What factors and processes underlie the mental life and behavior of individuals and groups?

In the last few decades psychology has extended its interests and activities into most aspects of human behavior. Not only is it a science in its own right, but it has important applications and contributions in a wide variety of fields. It has specific relevance for students preparing for careers in teaching, counseling, industrial relations, social work, law, medicine, and in many branches of government service. Furthermore, it enriches and clarifies for the individual many of the concepts in the other sciences, in the humanities, and in the arts.

A major in Psychology requires a total of 45 hours, including courses 11, 112, 113, 115, 118, and two seminars. Aside from these courses, the student must elect the remainder of his program from the upper division courses. A maximum of 10 of the 45 hours may be chosen from a selected list of courses in other departments, with consent of the department advisor.

### Lower Division Courses

**1. Effective Study. (2) A.W.S. Staff**

A practical course in such activities as budgeting time, notemaking, memorizing, straight thinking, use of library, etc. Open to lower division students only, except by consent of instructor.

**5. Psychology of Adjustment. (3) A.W.S. Staff**

A practical course dealing with the applications of psychology to typical problems of college students in such areas as emotional, social, and vocational adjustment. Not intended for those who have taken or will take Psychology 11.

**11. General Psychology. (5) A.W.S. (GER-SS) Allen, Hardy,  
Howell, Moffitt, Peterson, Taylor**

Foundation course covering the essentials of the modern scientific psychology. Prerequisite for all upper division psychology classes.

**22. Applied Psychology. (3) W. (†GER-SS) Prerequisite: Psychology 11. Staff**

Survey of applications of psychological principles and techniques in the fields of business, industry, advertising and selling, legal procedures, medicine, and education.



Upper Division Courses

112. **Advanced General Psychology.** (5) W. Prerequisite: Psychology 11. Allen  
Intensive consideration of the facts and principles of general psychology with special emphasis upon certain topics of interest to advanced students. Intended primarily for majors and minors in psychology.
113. **Elementary Statistics.** (5) A.S. Peterson  
The logic and understanding of basic descriptive and inferential statistics and their relation to problems of relatively simple experimental design. Problems and techniques: variability, central tendency, correlation, scaling, combination of measures, common sampling distributions, standard error, and concepts of significance. Presupposes mastery of elementary mathematics. (See also Educational Research and Services 115, Sociology 176, and Mathematics 152s.)
115. **Experimental Psychology.** (4) W. Four lectures or demonstrations and six additional laboratory hours per week. Prerequisite: Psychology 11. Peterson  
Consideration of psychological methodology and its application to fields of sensation, perception, learning, emotional expression, reaction time, work, and fatigue.
118. **History and Modern Viewpoints.** (5) S. Prerequisite: Psychology 11. Howell  
Historical background of present-day psychology and a comparative study of certain important contemporary trends in psychology.
121. **Psychology of Childhood and Adolescence.** (5) A.W.S. (†GER-SS) Prerequisite: Psychology 11 or equivalent. Taylor  
Development from infancy to maturity.
130. **Clinical Psychology.** (3) W. Prerequisite: Psychology 11. Allen  
A survey of the field of clinical psychology; professional relationships; etiology of problem behavior; diagnostic techniques and remedial procedures; applications to home, school, industry, and community. (See also Health 130.)
139. **Abnormal Psychology.** (3) S. Prerequisites: Psychology 11. and consent of instructor. Allen  
Dynamics of maladjustment; implications for normal psychology; description and meaning of abnormal and unusual psychological functions; character disorders, psychoneuroses, and psychoses; modern therapeutic procedures.
140. **Psychology of Personality.** (4) A. (†GER-SS) Prerequisite: Psychology 11. Moffitt  
Historical background; major theories; motivation; problems of traits, types, organization of personality; genetic and cultural determinants; marks of mature personality; modification of personality.

- 143. Mental Hygiene.** (3) S. (†GER-SS) Prerequisite: Psychology 11. C. Taylor  
Intended to yield insight toward the prevention and amelioration of mental and personal difficulties. Important for prospective parents, teachers, and social workers. (See also Educational Research and Psycho-Educational Services 106 and Health 143.)
- 145. Social Psychology.** (5) S. (†GER-SS) Prerequisite: Psychology 11. Hardy  
Fundamental psychological consideration of such topics as social factors in individual development; language development; nature and reorganization of beliefs and attitudes; frustration and aggression; role and status; leadership; prejudice; propaganda and counterpropaganda; religion; war and peace.
- 164. Industrial Psychology.** (3) A.W. Prerequisite: Psychology 11. Hardy, Moffitt  
Special application of psychology in human relations program for management. Also important issues in relation to motivation, morale, safety, efficiency, etc. (See also Business Management 164.)
- 165. Business Psychology.** (3) A. Prerequisite: Psychology 11. Moffitt  
Psychological aspects of business, especially in advertising, personal selling, and research techniques in these fields.
- 167. Personnel Psychology.** (3) S. Prerequisite: Psychology 11. Peterson  
Selection, application, and interpretation of psychological tests; job analysis; personality problems of the worker. (See Business Management 167.)
- 171. Psychological Tests.** (4) W. Prerequisites: Psychology 11 and 113. Howell  
History and present status of individual and group psychological tests; emphasis on work of Binet; meaning of standardization, reliability, validity; survey of various tests and results of testing. (See also Educational Research and Psycho-Educational Services 110.)
- 180. Comparative Psychology.** (5) W. Prerequisite: Psychology 11. Allen  
Survey of methods and results of comparative research on animal learning, innate behavior patterns, motivation, social behavior, individual differences, abnormal behavior; correlation of structure with function.
- 181. Physiological Psychology.** (5) S. Prerequisite: Psychology 11. Staff  
Development and structure of the nervous system; levels of neural organization; physiological correlates of psychological functions: sleep, activity, drives, learning, intelligence; localization of function; correlation of sensory functions with underlying structures.

- 191, 192, 193, 194. Psychology Seminar.** (1-1-1-1) A.W.S. Required of all upper division psychology majors. Staff  
Reports and discussion of special topics and current psychological literature.
- 198. Independent Readings.** (1-3) A.W.S. Staff

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- |   |          |
|---|----------|
| <b>212. Perception and Sensation.</b> (3) A.                      | Peterson |
| <b>213. Advanced Statistics (Second Course).</b> (3) A.           | Howell   |
| <b>214. Methods of Research.</b> (3) W.                           | Peterson |
| <b>228. Psychology of Learning.</b> (3) W.                        | Peterson |
| <b>230. Advanced Clinical Psychology.</b> (2) S.                  | Staff    |
| <b>231. Psychosomatic Problems.</b> (3) A. (Not given this year.) | Staff    |
| <b>238. Deviate Children.</b> (3) S.                              | Allen    |
| <b>245. Group Dynamics.</b> (3) S.                                | Staff    |
| <b>250. Human Behavior: Theory.</b> (3) A.                        | Hardy    |
| <b>251. Personality: Culture and Adjustment.</b> (3) W.           | Moffitt  |
| <b>272. Individual Test Practice.</b> (3) S.                      | Howell   |
| <b>273. Projective Techniques.</b> (3) A.                         | Taylor   |
| <b>291, 292. Seminar.</b> (1-1) A.W.S.                            | Staff    |
| <b>298. Independent Readings.</b> (1-3) A.W.S.                    | Staff    |
| <b>299. Independent Research.</b> (1-3) A.W.S.                    | Staff    |
| <b>300. Thesis for Master's Degree.</b>                           | Staff    |

## Recreation

Professors: W. Hales, Harrison, Nash, Holbrook.

Associate Professor: Andrus.

Assistant Professors: Alder, F. W. Dixon, Gamett, Stewart, Turner.

Instructors: Cowan, Heaton, Webb.

### RECREATION MAJOR

Students majoring in Recreation will take the following courses: Recreation 28, 47, 63 or 156, 70, 80, 123, 131, 162, 187, 188; Physical Education 11, 12, 30, 31, 32, 46, 70, 88, 89, 120, 121, 134, 137, 138, and an additional 12 hours of special interest to be selected by the student with departmental approval.

### RECREATION MINOR

A minor in Recreation is obtained by completing the following courses: Recreation 47, 63, 80, 123, 131, 137, 162, 187, 188; Physical Education 88 and 89 and nine additional hours to be elected from the following: Recreation 6, 10, 28, 30, 44, 45, 67, 100; Physical Education 11, 12, 30, 31, 32, 46, 51, 52, 53, 54, 55, 56, 70, 120, and 121.

### Lower Division Courses

3. **Plant Taxonomy.** (5) S. Three lectures and two two-hour laboratory periods each week. Harrison  
General principles of taxonomy and the use of manuals with emphasis on the classification of the local flora. (See Botany 3.)
10. **Bowling.** (1) A.W.S. Fee \$5 to \$7. Dixon
26. **Photography.** (3) A.S. W. Hales  
Lectures on the theory and art of photography; laboratory exercises in photographic manipulation, determination of the characteristics of photographic materials, color, sensitivity, etc.
28. **Upholstery.** (2) A. Two two-hour periods per week. Gamett  
Typical forms of upholstery, including foundations with and without springs.
30. **Tool Technique.** (3) A. Gamett  
(See Mechanics 30.)
- 31, 32. **Cabinet Construction.** (3) W.S. Three two-hour periods per week. Prerequisite: Mechanics 20. Gamett  
Use of hand machine tools in the construction of fine furniture. Drawings, specifications, and cost estimates of all projects must be submitted.

- 44. Outdoor Experience through Organized Hiking.** (1) S. Saturday. Fee. Webb  
Hikes will be taken in the canyons and mountains of the vicinity. Short hikes are planned for the beginning of the quarter, and longer, more strenuous climbs will be taken at the end of the quarter.
- 45. Horseback Riding.** (1) A.S. Two periods each week. Holbrook  
Group instruction in riding with a development in the techniques and with instruction in "aids." Correct handling of horse, and the development of gait will be taught. Progress will be graded from the beginning phases of horseback riding.
- 47. Outing Activities.** (1) A.S. Fee. Cowan  
Selected seasonal activities will be conducted which may include such activities as snowshoeing, hiking, horseback riding, canoeing, sleighing, ice skating, tracking and trailing, and nature observation. Individual expense may be incurred in some of these activities. (Permission to withdraw with refund restricted.)
- 50. Wood Cutting.** (2) A. Andrus  
Wood cutting and related relief printing processes.
- 59. Ceramics.** (2) A.W.S. Turner  
Ceramics and pottery with clay as the basic medium.
- 63. Crafts.** (2) A.W.S. Three periods each week. Stewart  
Leather, wood, raffia, and reed used as basis for creative design.
- 67. Skills and Techniques for Outdoor Recreation.** (1) S. Fee. Staff  
One two-hour period each week.  
Skills and techniques in various outdoor recreation activities including fly-tying, skish, and fly-casting will be given. Certain equipment including vise, feathers, thread, and hooks will be required of all students.
- 70. Plastics.** (2) A. Two two-hour periods per week. Gamett  
Fundamental hand and machine operations used in working plastics. (See Art 64.)
- 80. Social Dancing.** (1) A.W.S. Heaton
- 81. South American Dances.** (2) A.W.S. Heaton

#### Upper Division Courses

- 100. Art Metal Crafts.** (2) W. Prerequisites: Drawing 40 and Art 10. Three two-hour periods per week. Gamett  
Projects in metal hand tooling in brass, copper, and aluminum, soldering and spinning. (See Mech. Arts 100.)
- 123. Camp Leadership.** (3) S. Staff  
Problems related to organizing camping and counselor training will constitute the major emphasis of the course.

**\*131. The Theory of Play. (3) A. Holbrook**

The theory of play and its organization. Gives consideration to the history and classification of play, the need for play in modern life, and play in education. (See Educational Instruction 172.)

**\*137. Philosophy of Recreation and Leisure. (3) A. Nash**

This course analyzes the needs of individuals for recreation in our modern, complex society. The relationship of creative activity, full living, prevention of delinquency, and the organization of wholesome activity around the home will be fully discussed.

**\*138. Administration of School and Community Camps. (3) W. Nash**

This course considers the objectives and problems involved in establishing community or school camps for children. Public agency camps will be considered rather than private camps, and best practices dealing with location, safety, health, and the program of activity will be thoroughly analyzed.

**156. Arts and Crafts for Elementary Teachers. (2) A.W.S.**

Alder, Andrus, Staff

A practical course in handicrafts. Students will participate in simple weaving, clay modeling, dyeing, paper decorating, bookmaking, and other craft processes that can be carried on by children in the elementary school. (There will be a small fee for materials.) (See Educational Instruction 104.)

**\*162. Sociology of Recreation. (3) W. Staff**

The modern social situation and the rise of the recreation movement; the basic theories of play and recreation; the relation of recreational activities and interests to personal growth, group behavior, and social adjustments.

**167. Scout Leadership. (2) A.W.S. Staff**

A study of the fundamentals of the Boy Scout movement; basic training of leaders for scouting in the LDS Church. (See Church Administration 167.)

**180. Techniques of Teaching Ballroom, Square and Folk Dancing. (3) S. Heaton**

**187. Planning for Social Recreation. (2) A.W.S. Holbrook**

Principles and techniques in arranging for and conducting social recreation for family and church groups.

**188. Leadership in Church Dances. (2) A.W.S. Heaton**

This course is given to meet the needs of community, church, and school recreation leaders. Designed particularly to give experience and training in the church dance program.

## Religion

Professors: Sperry (Director of Graduate Studies in Religion, 122S), Berrett, Ellsworth, Nibley.

Associate Professor: Belnap (Director of Undergraduate Division, 222S).

Assistant Professors: Bankhead, Barrett, Doxey, G. O. Larson, R. R. Rich\*, Yarn.

Instructors: Bennett, A. I. Bentley, J. R. Clark, Pearson\*, Rasmussen, Ricks\*, Riddle.

Faculty members from other departments of the University also instruct classes in the Division of Religion.

### GENERAL EDUCATION REQUIREMENTS IN THE DIVISION OF RELIGION

I. Freshmen and sophomore students must obtain a total of twelve hours credit in the following areas:

Book of Mormon, Scripture 11, 12, 13.

Church History 31, 32, 33.

Missionary Training, L.D.S. Church Administration 41, 42, 43.

New Testament, Scripture 23, 24, 25.

Theology 4, 5, 6.

Each of these courses carries two credit hours per quarter. It is recommended that a student follow through all three courses of the sequences which are elected.

II. Juniors and seniors must obtain a minimum of six hours of upper division credit from the offerings of the Division of Religion which are **not** cross referenced for credit in other departments of the University. The remaining six hours of credit to fill the University requirement for graduation of twenty-four hours of credit in religion (or two hours per quarter for every quarter in residence) may be elected either from among the courses carrying cross-reference credit or from the other offerings of the Division of Religion.

Returned missionaries and transfer students ranking as juniors are not only permitted, but are expected, to elect upper division courses in religion.

## Archaeology

M. Wells Jakeman, Chairman

(The following are courses in the Division of Religion that are offered by the Department of Archaeology of the College of Humanities and Social Sciences.)

## Upper Division Courses

- 110. General Near Eastern and Biblical Archaeology.** (3) A.W.S. Prerequisite: Archaeology 1 or History 10, or consent of instructor. Jakeman, Christensen  
A survey of the principal excavations and monuments of archaeology in Mesopotamia, Egypt, Palestine, and other Near Eastern-Biblical lands, contributing to our knowledge of ancient oriental history and civilization. Special attention will be given the important discoveries of archaeology bearing upon the historical claims and geography of the Bible.
- 130. Ancient Civilizations of America.** (3) A.W.S. Prerequisite: Archaeology 1 or consent of instructor. Jakeman, Christensen.  
A study of the historical record and geography of the Book of Mormon, giving the claims of this early scripture as to the origins, characteristics, and history of the first civilizations of the New World; and the latest evidence of archaeology bearing upon these claims. (General Book of Mormon archaeology.)
- 191. Special Studies in Biblical Archaeology.** (1-2) A.W.S. Staff
- 192. Special Studies in Book-of-Mormon Archaeology.** (1-2) A.W.S. Staff

## Bible and Modern Scripture

Roy W. Doxey, Chairman

## Lower Division Courses

- 11, 12, 13. Introduction to the Book of Mormon and Its Teachings.** (2-2-2) A.W.S. (GER-R) Staff  
A consideration of the origin, content, and teachings of the Book of Mormon.
- 23, 24, 25. An Introduction to the New Testament and Its Teachings.** (2-2-2) A.W.S. (GER-R) Staff  
The life and teaching of Jesus and Paul and the historical situations which gave rise to the New Testament.

## Upper Division Courses

- 101, 102, 103. The Old Testament.** (2-2-2) A.W.S. (GER-R) Rasmussen  
This course deals with the structure and religious content of the Old Testament. An attempt is made to show that Israel's leaders had a vital religious message for the world of today.
- 104. The Spirit of the Old Testament.** (2) S. Martin  
An analysis of the literary problems, religion, and spirit which characterize the Old Testament.



- 111. Israel's Prophets.** (2) A.W.S. Sperry, Rasmussen  
The messages of the Old Testament Prophets—major and minor—are examined for the value they have and have had both in their time and in ours. Correlations with New Testament and modern prophecy are considered.
- 113. The Life of Christ.** (2) A. Bankhead, Bentley  
A consideration of the sources for the life of Christ; the political, religious, and geographical environment. An analysis of the Savior's prominent teachings, and a study of the Passion Week and Resurrection Period.
- 114. Paul the Apostle and Missionary.** (2) W. Bankhead, Bentley  
An examination of the life and teachings of the Apostle; his missionary problems and their resolution; results of his work.
- 115. An Historical Examination of the New Testament.** (2) S. Bankhead, Bentley  
An analysis of the structure of the New Testament. A consideration of its writings and forces which produced them.
- 124. Analysis of the Book of Mormon.** (2) A.W.S. Sperry  
A critical analysis of the Nephite literature.
- 125. The Doctrines of the Book of Mormon.** (2) A.W.S. Bankhead  
An advanced course dealing with the doctrines and teachings of the Nephite sacred scripture. Recommended especially for students who have not had Religion 11, 12, and 13.
- 131, 132, 133. The Doctrine and Covenants.** (2-2-2) A.W.S. Doxey  
(GER-R)  
A study of the origin and content of the Doctrine and Covenants.
- 138. The Pearl of Great Price.** (2) A.W.S. (GER-R) J. R. Clark  
A preliminary study of the origin and content of the Pearl of Great Price.
- 139. Doctrines of the Pearl of Great Price.** (3) A.W.S. (GER-R) J. R. Clark  
An advanced course dealing with the doctrines and teachings of the Pearl of Great Price.
- 141, 142, 143. Seminar.** (Arr.) A.W.S. Sperry, Nibley, Doxey, Rasmussen, Bankhead, Pearson  
Intended for senior or other advanced students who desire to pursue specialized problems related to the Bible and modern scripture. Admission by permission of instructors.

## Church History

Russell Rich, Acting Chairman

### Lower Division Courses

- 31, 32, 33. Latter-day Saint History and Doctrine.** (2-2-2) A.W.S. (GER-R) Staff  
A survey course in the history of the Church with a progressive study of the development of its institutions, beliefs, doctrines, and religious practices in relation to their social and historical setting.

### Upper Division Courses

- 101, 102, 103. **History of the Church of Jesus Christ of Latter-day Saints.** (2-2-2) A.W.S. (GER-R) Recommended for students who are juniors or seniors who have had 31, 32, 33. Rich, Larson  
An intensive study of the history of the Church from 1805 to 1846.
- 104, 105, 106. **History of the Church of Jesus Christ of Latter-day Saints.** (2-2-2) A.W.S. (GER-R) Recommended for students who are juniors or seniors or who have had 31, 32, 33. Rich, Larson  
An intensive study of the history of the Church from 1846 to the present.
107. **Biography of L.D.S. Leaders.** (2) A.W.S. (Not given this year.) Staff
114. **The Primitive Church and the Apostasy.** (2) A. (GER-R) Nibley
115. **The Rise of the Western Church, to 600 A.D.** (2) W. (GER-R) Nibley
116. **The Medieval Church, 600-1500 A.D.** (2) S. (GER-R) Nibley

### L.D.S. Church Organization and Administration

Chauncey Riddle, Chairman

### Lower Division Courses

- 41 42, 43. **Missionary Approach to the Gospel.** (2-2-2) A.W.S. Staff  
Open to all students. Intended for those who cannot elect the more intensive missionary-training course.

### Upper Division Courses

#### Priesthood

101. **Priesthood and Church Government.** (2) A.W.S. Doxey  
This course deals with the powers, authority, and functions of the priesthood and its role in Church government.

#### Church Welfare

111. **The Church Welfare Program.** (2) A.W.S. Doxey  
A study of the historical development and the economic and spiritual aspects of the L.D.S. Welfare Program.

## Genealogy

- 117. The Principles of Genealogy and Temple Work.** (2) A.W.S. Bennett  
Principal topics: genealogy in the plan of salvation, mission of Elijah, research, pedigree, family and temple records, Genealogical Society of Utah, Church ordinances, marriage, and temple work. Class trip to office of Genealogical Society.
- 118. Methods of Genealogical Research.** (2) W.S. Prerequisite: 117 or consent of instructor. Bennett

## Missionary Methods

Classes in this section are provided primarily for students who look forward to missionary service in the stakes and missions of the Church. Courses 121, 122, and 123 form a single unified fifteen-hour program for persons who desire, for a single quarter, to study problems related to the presentation of the gospel. (Lower division students may be admitted by consent of the instructor.)

- 121. Latter-day Saint Doctrine.** (5) A.W.S. Bankhead  
A scriptural approach to certain vital doctrinal themes commonly used in the mission field.
- 122. Latter-day Saint Doctrine.** (5) A.W.S. Doxey  
A continuation study of vital doctrinal themes commonly used in the mission field.
- 123. Great L.D.S. Missionaries.** (5) A.W.S. Staff  
An examination of the writings, methods, and spirit of certain great Latter-day Saint missionaries.
- 125, 126, 127. The Gospel in French.** (2-2-2) A.W.S. Prerequisite: 15 hours of French or consent of instructor. J. R. Clark III  
A consideration of the gospel message and problems incident to its presentation in French-speaking countries.  
(See French 115, 116, 117.)
- 131, 132, 133. The Gospel in German.** (2-2-2) A.W.S. Prerequisite: 15 hours of German or consent of instructor. Watkins  
A consideration of the gospel message and problems incident to its presentation in German-speaking countries.  
(See German 115, 116, 117.)
- 137, 138, 139. The Gospel in Spanish.** (2-2-2) A.W.S. Prerequisite: 15 hours of Spanish or consent of instructor. Gibson  
A consideration of the gospel message and problems incident to its presentation in Spanish-speaking countries.  
(See Spanish 115, 116, 117.)
- 146, 147, 148. Missionary Leadership.** (2-2-2) A.W.S. (Not given this year.) Ricks\*, Bankhead  
Returned missionaries will help train prospective missionaries.

149. **Economics of the Gospel Plan.** (2) A.W.S. Edwards  
The art of applying the principles and philosophy of the gospel to everyday situations.
- 151, 152, 153. **Church Administration.** (5-3-3) (151, A.S.; 152, W.; 153, S.) W. D. Lee  
Consecutive courses. Autumn: understanding children; Winter: curriculum, methods, and practice teaching; Spring supervision. For teachers, executive officers, and stake board members of the auxiliary organizations.
157. **Sacred Music.** (2) A.W.S. Staff  
The place and influence of music in worship; a study of the history and appreciation of the Latter-day Saint hymns. Students are given instruction and practice in conducting.
161. **Sacred Music Before 1650.** (2) A. Keeler
162. **Sacred Music: 1650-1750.** (2) W. Keeler
163. **Sacred Music: 1750 to present time.** (2) S. Keeler

#### Mutual Improvement Association

167. **Scout Leadership.** (2) A.W.S. Bentley  
A study of the fundamentals of the Boy Scout movement; basic training of leaders for scouting in the LDS Church.
184. **M.I.A. Drama.** (2) S. H. I. Hansen  
A study and practice of the forms and functions of drama used in the Mutual Improvement Program.
187. **Planning for Social Recreation.** (2) A.W.S. Holbrook  
Planning social activities for the home and church.
188. **Leadership in Church Dances.** (2) A.W.S. Heaton  
This course is given to meet the needs of community, church, and school recreation leaders. Designed particularly to give experience and training in the church dance program. (See Recreation 188.)

### Theology and Philosophy

Assistant Professor: Yarn (chairman, 112 S)

#### THEOLOGY

##### Lower Division Courses

- 1, 2, 3. **An Introduction to Mormonism.** (2-2-2) A.W.S. Staff  
An examination of the basic principles of Latter-day Saint Theology for non-LDS investigators of the gospel.
- 4, 5, 6. **The Principles and Doctrines of Mormonism.** (2-2-2) A.W.S. (GER-R) Staff  
A consideration of the basic principles and doctrines of the Church of Jesus Christ of Latter-day Saints.

## Upper Division Courses

- 101, 102, 103. **The Principles, Doctrines, and Philosophy of the Church of Jesus Christ of Latter-day Saints.** (2-2-2) A.W.S. Doxey  
 The distinctive doctrines and principles of the Restored Gospel of Jesus Christ. Recommended for upper division students who have not had 4, 5, 6.

## PHILOSOPHY

108. **Survey of Philosophy.** (2) A. (GER-R; GER-HA) Yarn  
 An introduction to the types, fields, and problems of philosophy.
110. **Introduction to Logic.** (3) A.W.S. (GER-R; GER-HA) Riddle  
 Formal aspects of language; deductive logic and scientific method.
111. **Philosophy of Science.** (3) A. (GER-R; GER-HA) Riddle  
 Discussion of the methods, postulates, and conceptual framework of modern physical science.
112. **Problems of Knowledge.** (3) W. (GER-R; GER-HA) Riddle  
 Analysis of how experience becomes knowledge.
- 113, 114, 115. **Moral Values, A Comparative Study.** (2-2-2) A.W.S. Cummings  
 Conduct patterns suggested by Latter-day Saint concepts of personal immortality, eternal progression, and the eternity of the family union.
125. **The Scientist Looks at Religion.** (2) (Not given this year.) Staff  
 Certain concepts of religion in the light of modern science.
- 131, 132, 133. **Seminar.** (Credit to be arranged.) A.W.S. Staff

## Church History and Philosophy

Sidney Sperry, Director of Graduate Studies in Religion

## Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

201. **Survey of Religious Education.** (2) (Not given this year.) Belnap

202. **Methods and Techniques for Religious Educators.** (2) (Not given this year.) Belnap  
(See Instruction 263.)
221. **Special Problems in L.D.S. Church History.** (2) A. Rich, Larson
222. **Special Problems in L.D.S. Church History.** (2) W. Rich, Larson
223. **Special Problems in L.D.S. Church History.** (2) S. Rich, Larson
241. **Historical Development of L.D.S. Doctrines and Practices.** (2) A. Staff
242. **Historical Development of L.D.S. Doctrines and Practices.** (2) W. Staff
243. **Historical Development of L.D.S. Doctrines and Practices.** (2) S. Staff
244. **Advanced Theology.** (2) S. Staff
251. **Problems in Teaching Religion.** (2) S. Staff
261. **World Religions: Principles of Comparative Religion.** (2) (Not given this year.) Nibley
262. **World Religions: Cult, Myth, and Priesthood in the Near East.** (2) (Not given this year.) Nibley
263. **World Religions: Ritual Patterns.** (2) (Not given this year.) Nibley
264. **The End of the Ancient World.** (3) S. Nibley
271. **Research Problems in Genealogy.** (2) A.W.S. Prerequisite: Church Administration 118. Bennett
281. **History of Ancient Philosophy.** (3) A. Yarn
282. **History of Medieval Philosophy.** (3) W. Yarn
283. **History of Modern Philosophy.** (3) S. Yarn
284. **Recent American Philosophy.** (2) (Not given this year.) Yarn
285. **Ethical Theory from Plato to Dewey.** (3) W. Yarn
286. **History of Christian Thought.** (2) (Not given this year.) Yarn
287. **Survey of Patristic Literature.** (2) S. Nibley
288. **Types of Religious Philosophy.** (3) S. Yarn
300. **Thesis for Master's Degree.** Staff

## Scripture

Sidney Sperry, Director of Graduate Studies in Religion

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

- |  |                   |
|--|-------------------|
| 201. The History of Israel. (3) A.                       | Sperry, Rasmussen |
| 202. The Prophets of Israel. (3) W.                      | Sperry, Rasmussen |
| 203. The Manners and Customs of the Hebrews. (2) S.      | Sperry            |
| 204. Interpreting the Old Testament. (2) S.              | Sperry, Rasmussen |
| 206. The Life and Teaching of Christ. (3) A.             | Staff             |
| 207. The Life and Letters of Paul. (3) W.                | Staff             |
| 208. The Non-Pauline Epistles and the Apocalypse. (2) S. | Staff             |
| 209. Interpreting the New Testament. (2) S.              | Staff             |
| 211. An Analysis of the Book of Mormon. (2) A.           | Sperry            |
| 213. An Analysis of the Doctrine and Covenants. (2) W.   | Sperry            |
| 215. The Pearl of Great Price. (2) S.                    | J. R. Clark       |
| 300. Thesis for Master's Degree.                         | Staff             |

## Semitic Languages

Sidney Sperry, Director of Graduate Studies in Religion

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

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|---|-----------|
| 221, 222, 223. Elementary Hebrew. (5-5-5) A.W.S.                        | Rasmussen |
| (Open to all students.)   |           |
| 224. Advanced Hebrew Grammar. (3) A.                                    | Rasmussen |
| 225. Hebrew Syntax and Selected Readings from Jonah and Ruth. (3) W.    | Rasmussen |
| 226. Hebrew Syntax and Selected Readings from Judges and Samuel. (3) S. | Rasmussen |

227. **The Hebrew Text of Haggai, Amos, and Malachi.** (2) A. Prerequisite: Two years of Hebrew or consent of instructor. Sperry, Rasmussen
228. **The Hebrew Text of Obadiah, Joel, and Zechariah 9-14.** (2) W. Prerequisite: Two years of Hebrew or consent of instructor. Sperry, Rasmussen
229. **Selected Portions of the Hebrew Text of Isaiah.** (2) S. Prerequisite: Two years of Hebrew or consent of instructor. Sperry, Rasmussen
230. **The Hebrew Text of Psalms.** (2) A. Prerequisite: Two years of Hebrew or consent of instructor. Sperry
- 231, 232, 233. **Biblical Aramaic and the Targums.** (2-2-2) A.W.S. Prerequisites: 221, 222, 223. Sperry
234. **The Reading of Ancient Hebrew Inscriptions.** (2-3) Given on demand. Prerequisites: Two years of Hebrew or consent of instructor. Sperry
- 241, 242, 243. **Elementary Syriac.** (3-3-3) A.W.S. Prerequisites: 221, 222, 223. Sperry
- 244, 245, 246. **Advanced Syriac.** (2-2-2) A.W.S. Sperry
- 251, 252, 253. **Elementary Akkadian.** (2-2-2) A.W.S. Prerequisite: Two years of Hebrew or consent of instructor. Sperry
- 255, 256, 257. **Elementary Egyptian.** (2-2-2) A.W.S. (Hieroglyphics) Prerequisite: Two years of a Semitic language or consent of instructor. Sperry
- 261, 262, 263. **First Year Arabic.** (5-5-5) A.W.S. Nibley
300. **Thesis for Masters Degree.** Staff

## R. O. T. C.

(See courses in Air Science.)

## Russian

(See courses in Modern and Classical Languages.)

## Scripture

(See courses in Religion.)

## Secondary Education

(See courses in Education: Instruction.)



## Secretarial Training

Associate Professors: Croft, E. L. Christensen, D. A. Peterson.

Assistant Professors: Crandall (chairman, 125 N), Stansfield, E. P. Taylor.

Instructors: Brough, Polson, Thurgood.

Students majoring in this department are required to complete Accounting 1, 2, 105; Economics 1; English 4; Finance and Banking 154; Marketing 107; Secretarial Training 11, 12, 13, 14, 15, or equivalent; 21, 22, 23, or equivalent; 24, 26, 110, 151, 152, 154, 155, 160.

Recommended: Economics 74; English 21; Mathematics 1 or 11, and Psychology 1 and 11.

Secretarial Training is one of the subjects comprising the composite major in business designed for prospective teachers.

### Lower Division Courses

11. **Elementary Shorthand.** (4) A.W. Staff  
An introduction and drill on the theory of Gregg Shorthand. Students with previous training are not permitted to take this course for credit.
12. **Elementary Shorthand.** (4) A.W.S. Prerequisite: Secretarial Training 11 or equivalent. Staff  
A completion of the theory of Gregg Shorthand.
13. **Elementary Shorthand Dictation and Theory Review.** (4) A.W.S. Prerequisite: Secretarial Training 12 or equivalent. Staff  
Complete review of Gregg Shorthand theory with speed building practice for students who write approximately 60 words a minute at the beginning of the course.
14. **Shorthand Theory Review and Speed Building.** (4) A.W.S. Prerequisite: Secretarial Training 13 or equivalent. Staff  
Review of Gregg Shorthand theory. A course designed for students who have had previous training and who write approximately 80 words per minute at the beginning of the course.
15. **Shorthand Speed Building and Introduction to Transcription.** (4) A.W.S. Prerequisite: Secretarial Training 14 or equivalent. Staff  
Speed building practice for students who write approximately 100 words per minute at the beginning of the course and introduction to transcription.
21. **Elementary Typewriting.** (2) A.W.S. Croft  
Direct and natural typewriting. Students with previous training not permitted to take this course for credit.

22. **Typewriting Speed Building.** (2) A.W.S. Prerequisite: Secretarial Training 21 or equivalent. Staff  
This course develops typing skill and provides practice in application for personal use.
23. **Typewriting Speed Building.** (2) A.W.S. Prerequisite: Secretarial Training 22 or equivalent. Staff  
This course provides practice in speed and accuracy.
24. **Mechanical Business Letters and Forms.** (2) A.W.S. Croft  
This course provides practice in speed and accuracy and includes special problems related to letter writing and business forms.
26. **Office Machines.** (2) A.W.S. Prerequisite: Accounting 1. Staff  
This course comprises training in the operation of Burroughs Comptometer and Monroe Calculators, also instructions on the Burroughs bookkeeping machine. It includes addition, subtraction, multiplication, and division. Practical problems are used in the practice work of the class. (See also Accounting 26.)
31. **Business English.** (3) A.W.S. Prerequisite: Freshman English. Staff  
A review of sentence structure, punctuation, spelling, and business vocabulary. A study of, and practice in, writing business correspondence.

### Upper Division Courses

110. **Business Report Writing and Correspondence.** (3) W. Prerequisite: Secretarial Training 31. Peterson, Stansfield, Christensen  
This course involves intensive study and experience in effectively communicating business analysis, opinions, and decisions through correspondence and advanced forms of business reports.
125. **Machine Accounting.** (2) A.W.S. Brough  
(See Accounting 125.)
151. **Advanced Shorthand Transcription and Speed Building.** (4) W.S. Prerequisite: Secretarial Training 15 or equivalent. Staff  
Intensive training in shorthand transcription on the typewriter in letter form. For students who write shorthand at approximately 110 words per minute at the beginning of the course.
152. **Advanced Shorthand Speed Building.** (4) A.S. Prerequisite: Secretarial Training 151 or equivalent. Stansfield, Thurgood  
Speed building from 120 to 140 words per minute with emphasis on vocabularies of various businesses and dictation on the expert level.
153. **High Speed Shorthand.** (4) W. Prerequisite: Secretarial Training 152 or equivalent. Stansfield, Thurgood  
Expert shorthand speed course above 130 words per

minute. Specialized vocabulary and testimony dictation. Emphasis on increasing shorthand ability through speed phrases and reporting shortcuts.

- 154. Office Techniques.** (3) W.S. Prerequisite: Secretarial Training 24 or equivalent. Staff

Training in personality building and office techniques. Instruction and practice in duplicating methods and procedures will also be included.

- 155. Secretarial Procedures and Directed Business Training.** (5) A.W.S. Prerequisites: Secretarial Training 151 and 154, or equivalent. Taylor, Christensen

A finishing course for those who desire to qualify for stenographic and secretarial positions; provides actual experience in office procedures.

- 160. Office Organization and Management.** (3) W. Croft  
(See Business Management 160.)

- 163. Personnel Administration.** (5) A.S. Staff  
(See Business Management 163.)

- 178. Fundamentals of Business Education.** (3) S. Croft

A course designed to lay the foundation for an understanding of the fundamentals of business education. Designed especially for all students who intend to teach any commercial subject.

- 184. Advanced Shorthand Speed Building and Introduction to Court Reporting.** (4) S. Prerequisite: Secretarial Training 153 or equivalent. Stansfield, Peterson

Dictation above 150 words per minute with introduction to court reporting and Congressional Record material. Designed for the students who desire rapid dictation in order to make reports of committee meetings, board of directors' meetings, conventions, and conferences, or to enter the field of court reporting.

- 198. Methods of Teaching Typewriting, Shorthand, and Bookkeeping.** (3) W. Croft, Peterson

A study of methods of teaching typewriting, theory of presentation, measurements, and approaches. Also Gregg shorthand with emphasis on the manual, functional, and direct methods. Consideration will be given to presentation of principles, details of theory, mechanics of dictation, tests, grades, devices for motivation, and speed-building. Latest methods and procedures in bookkeeping.

## Semitics

(See courses in Modern and Classical Languages  
and in Religion.)

## Sewing

(See courses in Family Living.)

## Sociology

Professors: Bradford (chairman, 182 N), Ballif\*, Lloyd, Symons.

Associate Professor: Smith.

Assistant Professors: Canning, Payne.

Instructor: V. W. Larsen.

Majors in the department are required to take courses 11, 12, 103, 104, 110, 182, 186, and 188 or 189, and to present total sociology credit of 40 hours or more.

Recommended courses, beyond those required, are listed below for each of several goals that sociology majors might have in mind:

General cultural education—any or all courses.

Teaching—107, 108, 112, 114, 124, 128, 136, 140, 141, 152, 156, 160, 162, 170, 172, 176.

Social Work—112, 114, 116, 124, 128, 132, 134, 136, 138, 144, 146, 160, 162, 170, 172.

Research and/or graduate study—114, 118, 141, 142, 152, 156, 160, 170, 172, 178, 187.

Majors and minors are not only advised to take as many courses in the department as they can, but to broaden their background with courses in related fields, such as psychology, zoology, geography, political science, history, archaeology, economics, geology, philosophy of education, etc.

Sociology is one of the subjects comprising the composite major in social science designed for prospective teachers. (See page 160.)

### Lower Division Courses

- 11. Introductory Sociology.** (5) A.W.S. (GER-SS) Staff  
This course is designed to give the groundwork for all sociological study. It presents a general view of social organization, social forces, and a practical working theory of the nature of society.

- 12. Social Problems.** (5) A.W.S. (GER-SS) Staff  
This course is a study of the forces within society which produce disorganization and develop social problems. Specific problems such as crime, poverty, political corruption, racial conflicts, mental illness, etc., will be discussed.

- 13. Courtship and Marriage.** (2) A.W.S. Staff  
This course is designed to assist the college student with the problems of dating, mating, and preparation for family living. Emphasis is placed on personality and the problems of adjustment in successful marriage.

## Upper Division Courses

The starred courses can be taken by graduate students. A maximum of 10 hours from these courses is all that can be counted toward the master's degree.

103. **Development of Sociological Thought.** (3) A. Bradford, Canning  
An analytical study of leading social thought from early times to and including the work of Herbert Spencer. The origins of sociology.
104. **Contemporary Sociological Theory.** (3) S. Bradford, Smith  
Emphasis is given to major developments in contemporary sociology. The contributions of leading present-day sociologists are analyzed.
107. **Development of Social Reform Movements in the United States.** (3) W. Symons, Payne  
A study of the social aspects of representative economic political and social thought from Adam Smith to John Dewey, as they influence social reform movements in the U.S.
- \*108. **Cultural Anthropology.** (3) W. Bradford, Canning  
Consideration is given to the institutions and structures of various societies. The meaning and content of culture are analyzed.
- \*110. **Principles of Sociology.** (3) W. Bradford  
An analysis of the various principles on which society operates.
112. **Social Aspects of Mental Health.** (3) S. Symons  
A study of personality disorders and emotional maladjustments which originate in group life. Attention will be given to social causation, manifestations, treatment and prevention of these mental ills.
114. **Social Psychology.** (3) W. (GER-SS) Canning, Larsen  
A study of the social factors which influence human behavior. This course attempts to evaluate the social significance of mob-mind, propaganda, and other group phenomena.
116. **Social Control.** (3) S. Larsen  
A study of the means of control of the individual by groups. Such agencies as public opinion, belief, social suggestions, ceremony, personal ideals, etc. will be studied in detail.
118. **Social Ethics.** (3) W. Lloyd  
(See Also Educational Values and Philosophy 100.)
124. **Introductory Criminology.** (3) A. (GER-SS) Smith, Symons  
A study of the nature and extent of criminal behavior, including the causes of crime and the treatment of offenders.

125. **Juvenile Delinquency.** (3) W. Symons, Smith  
The lawlessness of children and adolescents. Causation, treatment, prevention, and outlook are stressed.
127. **Organized Crime.** (3) S. Symons  
A study of the historical backgrounds for and the development of organized crime in the United States, and proposals for counteracting and preventing.
128. **Race Relations.** (3) W. (GER-SS) Symons, Ballif  
A study of the basic processes operating in present-day inter-relations of racial groups. Attention is given to problems of the second generation arising out of conflicting cultural backgrounds.
132. **Labor Problems.** (3) A. Miller  
(See also Economics 161.)
134. **Social Legislation.** (3) (Not given this year.) Ballif  
A study of the underlying principles and techniques of social legislation. A consideration of social legislation now operative, with special reference to needed measures.
- \*136. **Community Organization and Leadership.** (3) A. Larsen, Ballif  
Problems of community life and action, and the methods of promoting them through organization and leadership.
138. **The Cooperative Movement.** (2) (Not given this year.) Ballif, Larsen  
The meaning of cooperation and the development of the cooperative movement. The course logically includes consideration of the types of cooperatives, the problems that have grown up with them and the principles upon which co-operatives work.
- \*140. **Modern America.** (3) S. Bradford  
An analysis of some of the distinctive features of the major social institutions of the United States. Special attention will be given the governmental, kinship, occupational, property, and educational patterns.
141. **Human Relations in Industry.** (3) A. Larsen  
The development of the industrial plant as a social organization, the major problems of applied industrial sociology and the adjustment of the worker to the work situation.
142. **Methods of Research in Human Relations.** (3) W. Larsen  
Theory, methods, and actual field work in human relations—on case studies, development of research problems, and experience in looking at and analyzing human behavior in industrial situations.
144. **An Introduction to Social Work.** (2) A. Ballif, Payne  
An introductory survey of the various fields and methods of social work; the extent of social work and its implications for related professions.

- 146. Social Case Work.** (2) W. Staff  
Principles and practices of case work with the maladjusted and the dependent.
- 152. Population.** (3) A. Smith, Bradford  
Theories of population increase; problems relating to composition, distribution, density, and migration. The qualitative and quantitative aspects of suggested population policies are analyzed.
- 156. Rural Sociology.** (3) A. Symons, Payne, Bradford  
An analysis of the sociology of rural life. Attention is given to rural associations, organizations, population, and social processes. Special consideration is accorded certain rural social problems.
- 160. Urban Sociology.** (5) W. Smith  
A study of the evolution and problems of urban life. Special emphasis will be given to human ecology, which is a study of the special relationship of man to physical and social environments.
- 162. Sociology of Recreation.** (3) (Not given this year.) Ballif, Payne  
The modern social situation and the rise of the recreation movement; the basic theories of play and recreation; the relation of recreational activities and interests to personal growth, group behavior, and social maladjustments.
- 170. Marriage.** (3) W.S. Canning, Ballif, Bradford  
An advanced course designed for the specialist in family counseling and for both the married and those ready for marriage who desire a better understanding of the institution and the problems involved. Sociological discussions will be supplemented from time to time by lectures from specialists in other fields.
- 172. The Family.** (3) W. (For Sociology majors only.) Bradford, Canning, Symons  
A study of the history and development of the family as a special institution. The course also considers the modern family and its problems.
- 176. Educational Sociology.** (3) A. Smith  
An introductory study of the principles of educational sociology and their application to the theory and practice of school administration, curricula, and methods of instruction.
- \*178. The Sociology of Religion.** (2) W. Ballif, Smith  
A study of religion as a social institution. Analysis will be made of the structure and social function of the church, of significant trends and social problems in religious behavior, and of the role of the church in the community and society at large.

182. **Methods of Research in Sociology.** (3) W. Canning, Smith, Larsen  
A critical survey of the various methods used in the investigation of sociological data. An attempt will also be made to develop a theory of social research.
186. **Social Statistics.** (5) A. Canning, Smith  
Graphic and tabular presentation, measures of central tendency, variability, probability, Chi-square, null-hypothesis, linear correlation. (See Mathematics 152s.)
187. **Advanced Statistics.** (3) W. Smith, Canning
- 188, 189. **Seminar.** (2-2) W.S. Staff  
Informal round-table discussions on current sociological problems.
- 194, 195. **Directed Research.** (1-3, 1-3) A.W.S. Staff  
Opportunity is given for the student to work out a problem in the field of his greatest interest. Direction in the methodology of research in the social science field and in the presentation of material.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

205. **Advanced Sociological Thought.** (3) W. Canning, Smith, Symons
206. **Advanced Contemporary Sociology.** (3) S. Bradford, Smith
224. **Research Methods in Criminology.** (3) S. Symons
226. **Penology.** (3) W. Smith
230. **Problems in Race Relations.** (3) A. Symons, Ballif
240. **Research in Population and Demography.** (3) S. Smith
250. **The Sociology of Personality Development.** (3) A. Smith
260. **Social Change.** (3) W. Symons, Larson
290. **Seminar.** (2) A. Staff



292. **Public Opinion.** (3) S. Larsen, Ballif
- 296, 298. **Special Research Problem.** (1-3) A.W.S. Staff
300. **Thesis for Master's Degree.** Staff

## Soils

(See courses in Agronomy.)

## Spanish

(See courses in Modern and Classical Languages.)

## Speech and Dramatic Arts

Professors: H. I. Hansen (chairman, 124 SpC), deJong, Morley,  
T. E. Pardoe\*.

Associate Professors: Bateman\*, Gledhill, O. Smith.

Assistant Professors: Clinger, Ludlow, Mecham, K. B. Pardoe,  
Skousen, Woodbury.

Instructors: Jex, Paulson, O. Rich, Struthers.

### REQUIREMENTS FOR MAJOR

It is recommended that students majoring in Speech and Dramatic Arts qualify for the foreign language requirement. Students may elect to specialize in one of five divisions of Speech. Required courses may be waived by the department committee on petition of the student. **Senior Seminar 162 is required of all majors.**

#### 1. Theatre and Dramatic Art

Basic courses: 1, 24, 41, 160, 162, 180.	Hours 22
Additional courses for specialization: 22, 23, 26, 122 or 123, 124, 125, 161a, 161b, 161c, 172.	26
Total Hours .....	48

Additional courses recommended: Speech 60, 126;  
English 82, 146, 165, 182, 199; Physics 2.

#### Sequence of Courses

	Autumn	Winter	Spring	Any	Other Req.
First Year	1 (5)	24 (3)	22 (3)		
Second Year		23 (5)		26 (2)	
		122 (3)	123 (3)		
Third Year	161a (2)	161b (2)	161c (2)	160 (3)	
			172 (3)	180 (5)	
Fourth Year	124 (3)	125 (3)			
	162 (3)				

#### 2. Public Speaking

Basic courses: 1, 24, 41, 160, 162, 180.	Hours 22
Additional requirements for specialization: 2, 11, 22, 100, 101, 162, 202 or 203, 170, 287.	26
Total Hours .....	48

Additional courses recommended: Speech 60, 107;  
courses in American History and Government.

## Sequence of Courses

	Autumn	Winter	Spring	Any	Other Req.
First Year	1 (5)	24 (3)			Physics 2 (3)
Second Year	11 (3)	22 (3)	2 (2)		Lang. (15)
			3 (3)		Lang. (10)
Third Year	41 (3)	101 (3)	287 (3)	160 (3)	
Fourth Year	100 (3)	202 (3)		180 (5)	
	162 (3)				

## 3. Speech and Hearing Rehabilitation

Basic courses: 1, 24, 41, 160, 162, 180.	Hours
Additional requirements for specialization: 182 or 183, 185, 186, 190, 191 or 192, 286, 195a, 195b, 195c, Psychology 143.	22
	27

Total Hours .....	49
Additional courses recommended: Speech 2, 60, 107; Psychology 11, 121, 130, 139, 140, 171; Elementary Education 160. Students are advised to take Zoology 45 in fulfilling their requirements in Biological Science.	

## Sequence of Courses

	Autumn	Winter	Spring	Other Req.
First year	1 (5)	24 (3)		Lang. (15)
Second year	41 (3)	Physics 2 (3)	180 (5)	Psych. 11 (5)
		Zoo 45 (5)		Lang. (10)
Third year	180 (5)	186 (3)	183 (2)	Psych. (10)
	185 (3)	182 (3)	191 (2)	Psych. (3)
		160 (3)	195a (2)	
Fourth year	195a,	195a,	162 (3)	Psych. (3)
	b, or c (2)	b, or c (2)	195a,	
	192 (2)	286 (3)	b, or c (2)	
El. Ed. 160 (3)		160 (3)	Psych 143 (3)	

## 4. Radio and Television

Basic courses: 1, 24, 60, 160, 162, 180.	Hours
Additional courses for specialization (any 25 quarter hours from the following): 51, 52, 53, 60, 141, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 161.	22
	25
Total Hours .....	47

## Sequence of Courses

	Autumn	Winter	Spring	Any	Other Req.
First Year	1 (5)		24 (3)	41 (3)	Lang. (15)
Second Year	51 (3)	52 (3)	53 (3)		Lang. (10)
Third Year	151 (1)	152 (1)	153 (1)	160 (3)	
	154 (5)	155 (5)	156 (5)	180 (5)	
Fourth Year	157 (2)	158 (2)	159 (2)		
	149 (3)	141 (3)	150 (2)		
	162 (3)				

Students majoring in this area should select a closely related minor. The following minors are suggested: Sociology, Psychology, Political Science, Journalism, Music, Commerce, English, Education, and Home Economics.

**5. General Speech for Teachers in Secondary Schools**

Basic courses: 1, 24, 41, 160, 162, 180.	Hours 22
Additional requirements for specialization: 2, 11, 22, 23, 26, 100, 161, 170.	25
Total Hours .....	47
Additional courses recommended: Speech 60, 107, 125.	

**Sequence of Courses**

	Autumn	Winter	Spring	Any	Other Req.
First Year	1 (5)		20 (3)		Psych. 11 (5)
Second Year	11 (3)	23 (5)	161 (3)		Lang. (15)
	or 2 (2)		26 (2)		Lang. (10)
	22 (3)				
Third Year	41 (3)	161b (2)	161c (2)	160 (3)	Physics 2 (3)
	100 (3)				
	161a (2)				
Fourth Year	170 (2)				
	162 (3)				

**REQUIREMENTS FOR MINOR**

The requirements for the general minor in Speech are made up of the basic courses required for all speech majors, e.g., Speech 1, 24, 160, 161 (6 hrs.), 180, plus 3 hours of electives.

The requirements for a minor in Speech and Hearing Rehabilitation are: Speech 1, 24, 171, 180, 182 or 183, 185 or 186, 190 or 191.

**Lower Division Courses****1. Fundamentals of Speech. (5) A.W.S. Staff**

A beginning course to aid self-improvement in speech as a mode of communication. It provides an opportunity to practice for greater effectiveness in your personal use of the various speech skills. This course is recommended for speech majors, prospective teachers, and all students who desire improvement in their everyday speech activities.

**2. Introduction to Public Speaking. (3) A.W.S. Staff**

A practical and general service course designed for all students who desire to improve their speech efficiency, poise, and self-confidence in public speaking situations. An opportunity to develop and improve skill in the organization and delivery of all types of speeches encountered in one's business, professional, social, and religious activities.

**3. Group Discussion. (2) A.W.S. Staff**

This course is concerned with a basic democratic procedure—cooperative thinking. It is addressed to those who serve on committees or boards; to those who attend staff meetings; to those who talk over common problems in church, school, or office—to all, in short, who are preparing to participate in, or lead informal discussion in small groups. Its purpose is a practical one—to promote more effective group thinking through discussion.

- 5p. Speech Clinic.** (1) (Arr.) Morley, Jex  
Corrective treatment of stuttering, lisping, and other forms of speech disorders.
- 6p. Speech Coaching.** (1) A.W.S. Staff  
Personal attention to individual needs beyond classroom practice.
- 7, 8, 9. Speech for Foreign Students.** (2-2-2) A.W.S. Staff
- 11. Introduction to Argument and Debate.** (3) A.W.S. Clinger  
The principles of argumentation and practice in debate.
- 12a, 12b, 12c. Debate Techniques.** (1-1-1) A.W.S. Skousen  
Open to members of the Forensic Squad who obtain approval of the Speech Department and the Debate Council. To obtain credit in debating, students must register for this course, with at least two hours of instruction each week.
- 22. Fundamentals of Interpretation.** (3) A.W.S. (GER-HA) Pre-requisite: Speech 24. Two-hour laboratory. Woodbury
- 23. Fundamentals of Acting.** (5) A.W.S. (GER-HA) Hansen, Woodbury  
Studied character enactment, two hour laboratory.
- 24. Voice and Diction.** (3) A.W.S. (GER-HA) Staff
- 26. Makeup.** (2) A.W.S. Gledhill
- 41. Introduction to Radio and Television Broadcasting.** (3) A.W.S. Ludlow, Rich  
Discussion of scope, influence, current practices, problems, and social implications of the American system of radio and television broadcasting; microphone practice and experience. Two-hour laboratory.
- 45. News Writing.** (3) A.S. Staff  
(See Journalism 61.)
- 51. Radio and Television Equipment.** (3) A.W.S. Rich  
Practice in the care and use of broadcasting equipment. Students who have had Speech 44 may not receive credit for this course.
- 52a, 52b, 52c. Radio and Television Announcing.** (1-1-1) A.W.S. Ludlow, Rich  
Practice in the presentation of all types of radio and television materials.
- 60. Practical Phonetics.** (3) A.W.S. deJong  
Designed to give a better understanding of diction in English and foreign languages.

#### Upper Division Courses

- 100. Advanced Speech Composition.** (3) A. Prerequisite: Speech 1. Skousen  
Advanced study and practice in styles of speaking.

- 101. Advanced Argument and Debate.** (3) W. Prerequisite: Speech 11. Skousen  
Analysis of classic debates and practice in argumentative writing and speaking.
- 102a, 102b, 102c. Debate Techniques.** (1-1-1) A.W.S. Skousen  
Open to members of the Forensics Squad who obtain approval of the Speech Department and the Debate Council. To obtain credit in debating, students must register for this course, with at least two hours of instruction each week.
- 104p. Public Speaking.** (1) A.W.S. Staff  
Individual instruction. (Fee)
- 107. Parliamentary Procedures.** (2) S. Staff  
The rules governing organizations and legislative bodies.
- 112. Introduction to the Theatre.** (5) A.W.S. Staff  
The course will introduce students to the fundamental theories of theatre arts so as to develop a discriminating appreciation and to provide a basic background for those interested in theatre.
- 122. Intermediate Acting.** (3) A.W. Prerequisite: Speech 23 or consent of instructor. Two-hour laboratory. Hansen
- 123. Advanced Acting.** (3) S. Prerequisite: Consent of instructor. Two-hour laboratory. Hansen
- 124, 125, 126. Theatre History.** (3-3-3) A.W.S. (GER-HA) Woodbury, Hansen
- 127p. Dramatic Technique.** (2) A.W.S. Staff
- 141. Radio News Writing.** (3) A. Prerequisite: Speech 45. Staff  
(See Journalism 141.)
- 146, 147, 148. Radio News Workshop.** (2-2-2) A.W.S. Staff  
(See Journalism 146, 147, 148.)
- 149. Radio and Television Advertising.** (5) W. Staff  
(See Journalism 149.)
- 150. Commercial Writing for Radio and Television.** (5) S. Staff  
(See Journalism 150.)
- 151, 152, 153. Advanced Radio Workshop.** (1-1-1) A.W.S. Prerequisite: consent of the instructor. Ludlow, Rich  
Experience in planning and producing radio programs for off-campus stations.
- 154. Radio and Television Programs and Audiences.** (5) A. Ludlow  
Analysis and extensive observation of basic program forms used in radio and television; requirements of an effective program structure; consideration of the audience situation.

- 155. Radio and Television Law and Program Planning.** (5) W. Ludlow  
 Discussion of the influence that public attitudes and the decisions of regulatory bodies have had on basic program standards and practice in planning radio and television programs consistent with these standards. Students who have had Speech 144 may not receive credit for this class.
- 156. Radio and Television Program Writing.** (5) S. Prerequisite: Speech 154. Ludlow  
 Practice in the writing of various types of low cost radio and television programs.
- 157, 158, 159. Television Workshop.** (2-2-2) A.W.S. Prerequisites: Speech 154 and consent of instructor. Rich  
 Practice in the production and direction of television programs for release over commercial stations.
- 160. Directing.** (3) A.W.S. Prerequisite: consent of instructor. Staff  
 For advanced students only.
- 161a, 161b, 161c. Stage Craft.** (1-1-1) A.W.S. Struthers  
 College and workshop productions in laboratories.
- 162. Senior Seminar.** (3) S. Required of all seniors. Hansen, Staff
- 163. Technique of Playwriting.** (3) A. Hansen
- 165. Historic Costume.** (3) W. Staff
- 167. Religious Drama.** (2) A.W.S. Hansen  
 (See Church Administration 184.)
- 170. Methods of Teaching Speech.** (2) A. Clinger
- 171. Speech in the Elementary Schools.** (3) W.S. Jex  
 Objectives and methods of developing good speech habits in children. Recognition and management of minor speech problems.
- 172. Advanced Interpretation.** (3) S. (GER-HA) Woodbury
- 180. Introduction to Speech Correction.** (5) A.W.S. Prerequisite: Speech 24. Morley  
 The causes, symptoms, and treatment of various types of abnormal speech.
- 182. Introduction to Aural Rehabilitation.** (3) W. Prerequisite: Speech 180. Jex
- 183. Lip Reading.** (2) S. Prerequisite: Speech 182. Jex  
 The teaching of lip reading to children and adults.
- 185. Stuttering.** (3) A. Morley  
 A study of the theories of cause and manifestations of stuttering.
- 186. Organic Speech Disorders.** (3) W. Mecham

190. **Clinical Methods in Correction of Functional Disorders of Speech.** (2) W. Prerequisite: Speech 180. Jex  
Diagnosis and treatment methodology.
191. **Clinical Methods in Correction of Organic Speech Disorders.** (2) S. Prerequisite: Speech 180. Mecham  
Diagnosis and treatment methodology.
192. **Clinical Methods of Teaching Speech to the Deaf and Hard of Hearing.** (2) S. Staff
- 195a, 195b, 195c. **Clinical Practice in Speech Correction.** (2) A. W.S. Prerequisites: Speech 180, 190, or 191. Jex  
Supervised practice in handling of various types of speech and hearing disorders.

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior to** registration and meets the same requirements made of the graduate students.

201. **Ancient Rhetoric and Oratory.** (3) A. Staff
202. **History of British Public Speaking.** (3) W. Staff
203. **American Oratory and Public Address.** (3) S. Staff
210. **Seminar in Public Speaking.** (2-4) Arr. Staff
215. **Regional Dialects and Linguistic Atlas.** (3) S. Prerequisites: Speech 60, 61, or 62. Staff
- 225, 226, 227. **History of the Theatre.** (3-3-3) A.W.S. Hansen, Woodbury
228. **Stage Design.** (3) Arr. May be repeated. Staff
229. **Playwriting.** (3) Arr. May be repeated. Hansen
230. **Seminar in Interpretation.** (1-4) Arr. Gledhill, Woodbury
232. **Experimental Theatre.** (2-4) Arr. Hansen
234. **Projects in Theatre.** (2-4) Arr. Woodbury, Hansen, Clinger, Gledhill
235. **Theory of Interpretation.** (3) Arr. Gledhill, Woodbury
236. **Oral Interpretation of Classic Literature.** (3) Arr. Hansen, Gledhill, Woodbury
237. **Program Building and Lecture Recital.** (3) Arr. Gledhill, Woodbury
238. **Seminar in Arena Theatre.** (2-4) Arr. May be repeated. Hansen



240. Stage Lighting. (1-3) Arr. Staff
241. Research Methods in Mass Communications. (3) A. Ludlow, Smith
242. Mass Communications and Society. (4) W. Ludlow, Smith
243. History of Radio and Television Programming. (3) S. Ludlow
249. Selected Readings in Radio and Television. (2-4) A.W.S. Staff
250. Seminar in Mass Communications. (2-4) A.W.S. Ludlow, Smith
252. Radio and Television Projects. (2-4) A.W.S. Staff
264. Advanced Play Production. (3) A.W.S. Hansen
- 281a, 281b, 281c. Seminar in Methodology of Speech Pathology. (1-3) A.W.S. Jex, Staff
- 282a. Advanced Studies in Stuttering. (1-3) A.W.S. Prerequisite: Speech 185. Morley
- 282b. Advanced Studies in Cleft Palate. (1-3) A.W.S. Prerequisite: Speech 186. Mecham
- 282c. Advanced Studies in Cerebral Palsy. (1-3) A.W.S. Prerequisite: Speech 186 Mecham
- 282d. Advanced Studies in Aphasia. (1-3) A.W.S. Prerequisite: Speech 186. Morley  
(Only two courses of the above series will be taught in any one quarter.)
283. Advanced Audiology. (3) Arr. Prerequisite: Speech 184. Jex, Staff
284. Audiometry. (3) A. Prerequisite: Speech 182. Jex, Staff
286. Anatomy of Ear and Vocal Organs. (3) W. Morley
287. Psychology of Speech. (3) S. Prerequisite: Psychology 11. Morley
288. Seminar in Psychophysics of Speech. (1-3) Arr. Staff
289. Research in Speech Science and Pathology. (2) Arr. Staff
290. Problems of the Producing Director. (3) Arr. Hansen, Woodbury
300. Thesis for Master's Degree. Staff

## Theology and Religious Philosophy

(See courses in Religion.)

## Zoology and Entomology

Professors: V. M. Tanner (chairman, 264 B), Hayward Cottam\*.

Associate Professors: D E. Beck, H. J. Nicholes.

Assistant Professors: A. L. Allen, W. W. Tanner.

The following course of study is for students who wish to major in zoology and entomology and prepare for post-graduate or professional work. Any deviation from this outline should be discussed with and approved by the chairman of the department.

First Year	A	W	S	Third Year	A	W	S
English 1, 2, 3 or 11, 12, 13 .....	3	3	3	English (Lit.) .....	3		5
Religion .....	2	2	2	Zoology 146 .....		4	5
Phys. Ed. ....	1	1	1	Botany 2, 3 .....	2	2	2
Health .....		1		Religion .....	2	2	2
Zoology 11 .....		5		Geology 12 .....	5		
Chemistry 7, 8, 9, or 14, 15, 16 .....	5	5	5	Language .....	5	5	5
Math 11 or 12 .....	5			Zoology 18 .....		3	
Geology 1 .....			5	Psychology .....	5		
	—	—	—	*Zoology 191 .....			9
Total hours .....	16	17	16	Total hours .....	17	17	17
Second Year	A	W	S	Summer			
Physics 31, 32, 33 ..	5	5	5	Fourth Year	A	W	S
Religion .....	2	2	2	Bacteriology 21 .....		4	
Zoology 12, 13 .....	5	5		Zoology 129 .....	5		
Entomology 30 .....	5			Zoology 175 .....		2	
History 70 .....			5	Zoology 182, 183 ..	1	1	
Botany 1 .....		5		Zoology 165 .....	5		
Entomology 132 ....			5	Zoology 173 .....		5	
	—	—	—	**Electives .....	6	5	17
Total hours .....	17	17	17	Total Hours .....	17	17	17

\*A six weeks summer field course is required of all non-premedical majors to be taken preferably between the junior and senior years. This will be a course in field techniques dealing with all the major groups of animals.

\*\*Electives will be chosen mainly from the major field and will be decided upon in conference with the major professor or head of the department.

Students who desire to prepare to teach biology are advised to take the following courses in the sequence outlined below.

First Year	A	W	S
English 1, 2, 3 ....	3	3	3
Religion .....	2	2	2
Zoology 11, 12 ....	5	5	
Chemistry 7, 8, or 14, 15 .....	5	5	
Math 11 or 12 .....			5
Botany 1 .....			5
Phys Ed. ....	1	1	1
Total hours .....	16	16	16

Second Year	A	W	S
Zoology 13 or 45 ....	5		
Entomology 30 .....	5		
Religion .....	2	2	2
Botany 2 .....		4	
Health 158 .....		3	
Zoology 18 .....		3	
Entomology 132 ....			5
Psychology 11 .....			5
Physics 31, 32, 33 ..	5	5	5
Total hours .....	17	17	17

Third Year	A	W	S
Religion .....	2	2	2
Botany 3 .....			5
Bacteriology 21 .....	4		
Ed. R. and S. 100; ..	3	3	
Ed. Adm. 100 ....		3	3
Ed. 160, Ed. Values and Phil. 104 ....	3	3	
Ed. Psychology ....	3		
Zoology 182, 183 ....	1	1	
Zoology 171, 157 or 158 .....		2	3
Geology 1, 12 .....		5	5
Elective .....			2

Total hours .....	16	16	17
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Fourth Year	A	W	S
Religion .....	2	2	2
Zoology 159 or 160 ..		3	3
Zoology 175 .....		2	
Botany 150 .....	5		
Botany 140 .....		5	
Ed. Inst. 118 .....		6	6
Sociology 11 .....	5		
History 70 .....	5		
Electives .....			5

Total hours .....	17	18	17
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## Zoology

### Lower Division Courses

11. **General Zoology.** (5) A.W.S. (GER-BS) Three lectures, two two-hour laboratory periods per week. Beck, W. Tanner, Allen
- 11b, **General Zoology.** (5) Staff  
For Nursing and Physical Therapy students.
12. **Invertebrate Zoology.** (5) A.W. Two lectures, three two-hour laboratory periods per week. Prerequisite: Zoology 11. Beck
13. **Comparative Anatomy.** (5) A.W. Two lectures, three two-hour laboratory periods per week. Prerequisite: Zoology 11. Hayward
18. **Survey Course in Heredity.** (3) A.W.S. (GER-BS) Prerequisite: Zoology 11 or Botany 1. W. Tanner  
(See Botany 18.)
45. **Vertebrate Anatomy and Physiology.** (5) A.W.S. (GER-BS) Three lectures, two two-hour laboratory periods per week. Does not fulfill pre-medical requirements. Prerequisite: Zoology 11. Nicholes

48. **Elementary Human Physiology.** (5) (GER-BS) Staff  
Open only to students in the College of Family Living.
51. **Human Physiology.** (4) A. Two lectures and two two-hour laboratory periods per week. Prerequisites: Zoology 11 and consent of instructor. Nicholes

### Upper Division Courses

128. **Aquatic Zoology.** (3) S. Two lectures and one two-hour laboratory period per week. Prerequisites: Entomology 30 and Zoology 12. V. M. Tanner
129. **Genetics.** (5) A. Two two-hour laboratory periods per week. Prerequisite: Zoology 18 or Botany 18. Allen
146. **Principles of Ecology and Bio-geography.** (5) S. (GER-BS) Prerequisites: Zoology 11, Botany 3. Several Saturday field trips. Hayward
157. **Mammalogy.** (3) A. One lecture, two two-hour laboratory periods per week. Saturday field trips. Prerequisite: Zoology 11. Hayward
158. **Ornithology.** (3) S. One lecture and two two-hour laboratory periods per week. Saturday field trips. Prerequisite: Zoology 11. Cottam
159. **Ichthyology.** (3) W. One lecture, two two-hour laboratory periods. Prerequisite: Zoology 11. V. M. Tanner
160. **Herpetology.** (3) S. One lecture, two two-hour laboratory periods. Prerequisite: Zoology 11. W. Tanner
165. **General Physiology.** (5) A. Prerequisite: Zoology 11. Organic Chemistry recommended. Nicholes
166. **Human Physiology.** (5) W. Prerequisites: Zoology 13, 165. Nicholes
170. **Vertebrate Histology.** (3) S. One lecture, two two-hour laboratory periods. Prerequisites: Zoology 11 and 13. Hayward
171. **Histological Technique.** (2) W. Two two-hour laboratory periods per week. Prerequisites: Zoology 11; 170 recommended. Hayward
173. **Vertebrate Embryology.** (5) W. Two lectures, three two-hour laboratory periods per week. Prerequisite: Zoology 13. Allen
174. **Parasitology.** (4) W. Two lectures, two two-hour laboratory periods. Prerequisite: Zoology 11. W. Tanner
175. **History of Biology.** (2) W. V. M. Tanner

178. **Experimental Embryology.** (4) S. Prerequisite: Zoology 173. Allen
- 182, 183. **Senior Year Seminar.** (1-1) A.W. Required of all majors in this department. Staff
186. **Natural History of the Local Invertebrate Fauna, Exclusive of the Insects.** (3) S. One lecture, two two-hour laboratory periods. Prerequisites: Zoology 11, 12, and Entomology 30. Beck
- 191, 192, 193. **Field Zoology.** (3-3-3) A.W.S. Staff  
Open only to students prepared to carry advanced zoological work.
197. **Natural and Human Resources.** (3) W. (GER-BS) Cottam  
(See Botany 166.)

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor prior to registration and meets the same requirements made of the graduate students.

- 210, 211, 212. **Research in Ichthyology.** (3-3-3) A.W.S. V. M. Tanner
213. **Natural History of the Amphibians and Reptiles.** (3) S. Prerequisite: 160. W. Tanner
- 216, 217, 218. **Research in Herpetology.** (3-3-3) A.W.S. Prerequisite: 160. W. Tanner
219. **Geographical Distribution of the Cold-Blooded Vertebrates.** (2) A. V. M. Tanner
- 223, 224, 225. **Research in Ornithology or Mammalogy.** (3-5) A.W.S. Prerequisites: 157, 158 or equivalent. Hayward, Cottam
227. **Research in Genetics.** (3) Allen
232. **Research in Embryology.** (3) Allen
237. **Radiation Biology.** (3) S. Allen
241. **Advanced Ecology.** (3-5) A.S. Prerequisite: 146 or equivalent and a good background in botany. Hayward
- 255, 256, 257. **Distributional Study of Parasitic Arthropods.** (3-3-3) A.W.S. Prerequisites: Zoology 11, 12, 146, 157, and Entomology 30. Beck
- 265, 266. **Research in Invertebrate Zoology.** (Arr.) A.S. Beck
267. **Research in Human Anatomy and Physiology.** (3) Nicholes

269. **Endocrinology.** (3) S. Prerequisite: Zoology 45 or 165. Nicholes  
 298. **Seminar.** (1) A. Staff  
 299. **Seminar.** (1) W. Staff  
 300. **Thesis for Master's Degree.** Staff

## Entomology

### Lower Division Course

30. **Introductory Entomology.** (5) A. (GER-BS) Three lectures, two two-hour laboratory periods per week. V. M. Tanner

### Upper Division Courses

132. **Insect Classification.** (5) S. Two lectures, three two-hour laboratory periods. Prerequisite: Entomology 30. V. M. Tanner  
 133. **Medical Entomology.** (4) S. Two lectures, two two-hour laboratory periods. Prerequisite: Entomology 30. Beck  
 134. **Economic Entomology.** (3) S. Two lectures, one two-hour laboratory and field period. V. M. Tanner  
 194. **Principles of Nomenclature.** (1) W. V. M. Tanner

### Graduate Courses

For regulations governing study beyond the bachelor's degree, see the Graduate Catalog. The following courses carry **only** graduate credit. A graduate course may be used by an advanced undergraduate in his baccalaureate program if he secures the permission of the instructor **prior** to registration and meets the same requirements made of the graduate students.

201. **Insect Physiology.** (3) A. V. M. Tanner  
 202. **Systematic Entomology.** (3) W. V. M. Tanner  
 203. **Field Entomology.** (3) S. V. M. Tanner  
 204. **Insect Morphology.** (3) A. V. M. Tanner  
 205. **Study of Insect Genitalia.** (3) W. V. M. Tanner  
 206. **Insect Literature and Nomenclature.** (3) S. V. M. Tanner  
 207. **Insect Embryology.** (2) A. V. M. Tanner  
 208. **History of Entomology.** (2) W. V. M. Tanner  
 300. **Thesis for Master's Degree.** V. M. Tanner

(Not more than six hours of credit granted for thesis.)

# Colleges, Schools, Divisions

## In Provo:

College of Biological and Agricultural Sciences

College of Commerce

College of Education

College of Family Living

College of Fine Arts

College of Humanities and Social Sciences

College of Physical and Engineering Sciences

College of Recreation, Physical and Health  
Education, and Athletics

Graduate School

School of Nursing

Division of Religion

Extension Division

## In Salt Lake City:

L.D.S. Business College

McCune School of Music and Art

## College of Biological and Agricultural Sciences

Raymond B. Farnsworth, Acting Dean (172 B)

The following departments are in the College of Biological and Agricultural Sciences:

Agricultural Economics  
Agronomy  
Animal Husbandry  
Bacteriology  
Botany  
Horticulture and Horticultural Specialties  
Industrial Arts and Drawing  
Zoology and Entomology

**Biological Division.** The following departments are included in the biological division of this college: Bacteriology, Botany, Zoology and Entomology.

The biological division of the College enables the student to study and to understand more fully the plant and animal world. Preparation for teaching and research is emphasized.

Students who are interested in medical technology, medicine, dentistry, and veterinary science, can receive their pre-training in the biological division of this college. Students desiring to register in these fields should make use of the guides offered.

**Agricultural Division.** The following departments are included in the agricultural division of this college: Agricultural Economics, Agronomy, Animal Husbandry, Horticulture and Horticultural Specialties, Industrial Arts.

The agricultural division provides instruction in the principles and technical operations pertaining to the farm, the shop, the trades, and industries. The students are prepared not only to satisfy the practical needs of the community, but they are also trained to become specialists in the fields of agricultural science, for laboratories and also for teaching on all educational levels. Capable leadership and efficient service in the phase of work they choose are emphasized.

### MEDICAL TECHNOLOGY

(Clinical Laboratory; Radiology)

Advisor: Don H. Larsen

Through a cooperative agreement with various hospitals, the Brigham Young University has made provision for training medical technologists. The curricula are designed to prepare students for careers in either the clinical laboratory or the radiological laboratory. The course indicated in the following outline consists of a three-year period of residence study at the Brigham Young University campus and one year of practical hospital internship.



During the fourth year (internship), the student will register and pay tuition. After satisfactory completion of the internship, the student is eligible to receive a Bachelor of Science Degree.

Freshman Year			
	A.	W.	S.
Chemistry 7, 8, 9 ..	5	5	5
Mathematics 1, 11,			
12 .....	5	5	5
English 1, 2, 3 ....	3	3	3
Health 1 .....	..	..	1
Physical Ed. ....	1	1	1
Sociology 13 .....	2	..	..
Religion .....	2	2	2
Total Hrs. ....	16	18	17

Sophomore Year			
	A.	W.	S.
Chemistry 110 .....	5	..	..
Physics 31, 32 .....	5	5	..
History 70 .....	..	..	5

Zoology 11, 12, 45 ..	5	5	5
Bacteriology 101,			
169 .....	..	5	5
Religion .....	2	2	2
Total Hrs. ....	17	17	17

Junior Year			
	A.	W.	S.
Chemistry 21, 22 ..	3	3	..
Bacteriology 181,			
182, 183 .....	5	5	5
English, Elective ..	3	3	3
Zoology 171, 174 ..	..	2	4
Religion .....	2	2	2
Social Science .....	5	..	..
Elective .....	..	..	3
Total Hrs. ....	18	15	17

### PRE-DENTAL COURSE

Advisory committee: C. Lynn Hayward (Chairman),  
Albert D. Swenson, Clyde Parker

A two-year pre-dental course is outlined below. It is designed to fill the minimum requirements for admission to most approved dental schools. However, most dental schools strongly advise three or four years of pre-dental training. Students who stay in college three years are advised to take more courses in English, social sciences, and humanities. Pre-dental students wishing to graduate from college with a bachelor's degree will need to select a major and minor and otherwise meet the University requirements for graduation. Students are also advised to consult dental school catalogs to make sure that specific requirements of the schools of their choice are met. Such requirements may be slightly more or slightly less than those suggested below.

Freshman Year			
	A.	W.	S.
English 1, 2, 3 ....	3	3	3
Religion .....	2	2	2
Zoology 11, 12 .....	5	5	..
Chemistry 14, 15, 16	5	5	5
Mathematics 1 or 12	..	..	5
Phys. Ed. 1, 2, 3 ....	1	1	1
Total Hours .....	16	16	16

Sophomore Year			
	A.	W.	S.
Physics 31, 32, 33	5	5	5
Psychology 11 .....	..	..	5
Chemistry 151, 152	4	4	..
Zoology 13 .....	5	..	..
Religion .....	2	2	2
Elective in social science or humanities	..	5	5
Total Hours .....	16	16	17

## PRE-MEDICAL COURSE

Advisory committee: C. Lynn Hayward (Chairman),  
Albert D. Swenson, Clyde Parker

The three-year course suggested below is designed to meet the minimum admission requirements of most of the approved medical colleges in the United States. Students are urged, however, to study catalogs or other information from medical schools of their choice and to consult members of the committee regarding modifications in their program. Should the student elect to graduate from the University before entering medical school, he will need to select a major and minor and otherwise fill the University requirements for graduation. In following the pre-medical program, the student should bear in mind that the general trend in pre-medical training is toward a liberal education in the humanities and social sciences as well as in the natural sciences.

Freshman Year			A.	W.	S.	Religion .....			2	2	2
English 1, 2, 3 .....			3	3	3	English or elective			2	2	5
Religion .....			2	2	2	Total Hours .....			17	17	17
Mathematics 1 or						Junior Year			A.	W.	S.
11, 12 .....			5	5	..	Chemistry 151, 152,					
Chemistry 14, 15, 16			5	5	5	153 .....			4	4	4
Zoology 11 .....			..	..	5	Zoology 173 .....			..	..	5
Phys. Ed. 1, 2, 3 ....			1	1	1	German or French					
Total Hours .....			16	16	16	or elective .....			5	5	5
Sophomore Year			A.	W.	S.	Social Science or					
Chemistry 21, 22 ....			3	3	..	Humanities ....			5	5	..
Zoology 12, 13 .....			5	5	..	Elective .....			2	2	2
Physics 31, 32, 33 ....			5	5	5	Religion .....			2	2	2
Psychology 11 .....			..	..	5	Total Hours .....			18	18	18

## PRE-VETERINARY COURSE

Advisory committee: C. Lynn Hayward (Chairman),  
Albert D. Swenson, Clyde Parker

D.V.M.

The following pre-veterinary course is based on a minimum of two years of college training. It will fill the entrance requirements of most of the veterinary schools in the United States. However the student is strongly urged to take 3 or 4 years of pre-veterinarian training and include some work in animal husbandry. Additional courses in mathematics and a course in bio-chemistry are also suggested. The student is advised, however, to consult the catalogs of schools of his choice for special requirements that may affect him.

## Freshman Year

**A. W. S.**

Sonhomore Year

**A W C**

Appendage - page 379

## PRE-OSTEOPATHY COURSE

**Chairman: A. Lester Allen**

Students intending to apply for admission to osteopathic schools should follow the outline given under Pre-medicine.

## PRE-PHARMACY COURSE

**Chairman:** A. Lester Allen

The first year of the curriculum of pharmacy schools may be completed at this campus. For specific details the student should consult the chairman of the Pre-pharmacy committee.

## PRE-OPTOMETRY COURSE

**Chairman:** A. Lester Allen

The admission requirements to optometry schools vary from two to four years of college work. Prospective students should consult the chairman of the Pre-optometry committee for specific details.

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**PRE-MEDICAL COURSE**

veterinarian training and include some work in animal husbandry. Additional courses in mathematics and a course in bio-chemistry are also suggested. The student is advised, however, to consult the catalogs of schools of his choice for special requirements that may affect him.

Freshman Year	A. W. S.		
English 1, 2, 3 ....	3	3	3
Religion .....	2	2	2
Chemistry 14, 15, 16	5	5	5
Mathematics 1 or 11	5	..	..
Botany 1 .....	..	5	..
Zoology 11 .....	..	..	5
Phys Ed. 1, 2, 3 ....	1	1	1
Total Hours .....	<u>16</u>	<u>16</u>	<u>16</u>

Sophomore Year	A. W. S.		
Physics 31, 32 .....	5	5	..
Chemistry 151, 152	4	4	..
Zoology 13 .....	5	..	..
Religion .....	2	2	2
Elective in social science .....	..	5	10
Elective in English or fine arts ....	..	..	5
Total Hours .....	<u>16</u>	<u>16</u>	<u>17</u>

## College of Commerce

William F. Edwards, Dean (30A-N)

The following departments are in the College of Commerce:

- Accounting
- Business Management
- Economics
- Finance and Banking
- Marketing
- Secretarial Training

In order that all students who plan to graduate with a major in one of the five departments of Accounting, Business Management, Economics, Finance and Banking, and Marketing may benefit from a common background of basic information and tools to facilitate their advanced work, they are required to take the core courses listed below. These courses form a basic training normally to be completed during the first two years of college work and before the student undertakes upper division work in his major department.

Accounting 1 and 2	10 hours
Business Management 35	5 hours
Business Management 75	5 hours
Economics 1	5 hours
Psychology 11 or substitute approved by counselor	5 hours

The courses in economics and psychology listed above apply toward the University general education requirement in social science. In addition to the above courses, it is recommended that many students in these departments will be able to fill the American History and Government requirement best by taking Economics 74 and Political Science 10.

Students in the College will be counseled during their freshman and sophomore years by members of the staff who have been selected by the Office of the Dean of the College of Commerce. Thereafter, students will be counseled under the direction of the Chairman of the department the student has selected as his major department for concentrated study.

The purpose of the College of Commerce is to provide men and women with thought and work habits which will enable them to acquire an economic self-reliance and individual happiness from their life's work, and to contribute intelligently and efficiently to the stability and abundance of our economy.

In view of the constant and progressive changes that are taking place in our society, routines and procedures of contemporary

business are rapidly becoming outdated and are being modified. It is expedient, therefore, that education endow the student with the capacity to make positive and productive adjustments to the dynamic environment of business.

In order to meet this challenge the program in the College of Commerce is built on the following objectives:

(1) Developing an understanding and appreciation of the **human characteristics and social aspects** of business, as they are related to the individual, the firm, and the community.

(2) Training in the use and understanding of the tools and information used in measuring, analyzing, and controlling business operations and economic change.

(3) Developing in the student a capacity to determine what information is relevant to the accurate solution of a business problem and to analyze, organize, and present the solution of the problem in an effective manner.

(4) Helping the student to acquire the capacity to communicate ideas orally and in writing.

To achieve these objectives, all of the departments in the college have included a broad offering from the social, human, and technical areas. Since executive leadership in the administration of modern business requires many of the same qualities, such as the ability to evaluate objective data and to reach mature conclusions regarding its relationship to business policies; and since every type of business is confronted with problems involving the offerings of all departments, each department requires selected courses from other pertinent areas.

The degrees of Bachelor of Arts and Bachelor of Science are given to graduates of this college.

### **PRE-GRADUATE BUSINESS PROGRAM**

All students planning to secure a degree at a graduate school of business may register for a pre-graduate business program administered by the College of Commerce. Early contact (preferably in the freshman or sophomore year) should be made with the dean, who will advise students concerning their work.

## College of Education

Asahel D. Woodruff, Dean (118 McKay)

The following departments are in the College of Education:

- Educational Administration
- Educational Values and Programs
- Instruction
- Educational Research and Services

The College of Education has as its principal function the educating of teachers, counselors, school librarians, principals, supervisors, superintendents, and other professional workers in education.

**High School Teaching.** Students who plan to prepare themselves for a career in high school teaching and related activities may do so either by registering within the College of Education or by registering in one of the other colleges of the University. In the latter case, the student must complete the required professional education courses and the necessary subject-matter and other courses for the teaching certificate under the joint direction of an advisor in the College of Education and an advisor in his major College.

**Elementary School Teaching.** Those who are interested in elementary school teaching and who desire to register for major study outside of the College of Education should inquire of the Department of Instruction or the Dean of the College of Education concerning the possibilities.

**Teaching as a Second Career.** Students who are preparing for careers in fields other than teaching may provide themselves with a second possibility for employment by meeting the requirements for certification as a teacher while they are completing the other preparation. By planning early in one's career, one may do this within the usual scope of the baccalaureate program and with little or no interference with the major program. It should be noted that at present this is particularly feasible for high school teaching, where depth of preparation in two or three subject-matter fields is desired, but also may be possible under special arrangements in the elementary school program.

**Early Decisions Desirable.** In either case, the student is urged to make the decision as early as possible in his college career to avoid conflicts in the scheduling of courses and to take fullest advantage of the maturing effect produced by spacing the study of teaching over a period of several quarters rather than concentrating it in two or three quarters.

**How to Proceed.** Those who decide to register in the College of Education should then make application for admission to the College in the Office of the Dean, 118 McKay Building. Copies of the requirements for admission are available there on request.



Those who decide to major in one of the other colleges in the University should make those arrangements, and also make application in the Office of the Dean of the College of Education for admission to the teacher-education program. Admission requirements to the program are the same as those for admission to the College.

**How to Become Certified.** Students who complete the certification requirements set forth in the College of Education, regardless of the college in which they are majoring, are eligible for certificates issued by the Utah State Board of Education. Certification is received from that Board, after application for certification has been made through the Dean of the College of Education, who in turn recommends the students to the State Board. All students who have met the requirements are recommended. Applications may be obtained in the Dean's Office and should be filed near the close of the quarter in which all requirements are met.

A student may prepare himself to be certified as any of the following:

- Teacher in Elementary Schools
- Teacher in Kindergarten
- Teacher in Secondary Schools
- Teacher of Special Classes for Handicapped Children
- Teacher of Vocational Homemaking in Secondary Schools
- Teacher of Industrial Arts in Secondary Schools
- Librarian in Elementary Schools
- Librarian in Secondary Schools
- Counselor
- Administrator-Supervisor in Elementary Schools
- Administrator-Supervisor in Secondary Schools
- Superintendent
- Teacher of Unit Shops in Industrial Arts
- Teacher of Trade and Industrial Education Day Trade Courses
- Supervisor of Trade and Industrial Education
- Local Director of Trade and Industrial Education
- Teacher and Teacher-Coordinator of Distributive Education
- Local Supervisor of Distributive Education

**Certification Requirements.** Certification of teachers is a function of the Utah State Board of Education. The Board of Education publishes requirements for certification in booklet form and in supplements. The present policy of the Board is one of stating minimum requirements in general terms. This is done for the purpose of encouraging the institutions that prepare teachers to engage in continuous study of the requirements, going beyond the minima in whatever ways seem desirable. While the Board is always able to certify a candidate without recommendation from a University, it chooses to require the recommendation of the officer in charge of teacher preparation in each institution. This requirement is of assistance not only to the State Board, but also the institution because of the assurance that its efforts to improve the program of preparation will not be vitiated by the ready availability of ways of going around its minimum requirements.

Inasmuch as those requirements are under constant study by the University, and are therefore subject to alteration from time to time, they are not printed in detail in this catalog, but are available in separate form. Alterations in the requirements will not be made retroactive in the case of any student, but may be made to apply to uncompleted portions of his program, where this can be done without difficulty.

**Selection of Candidates.** Candidates for certification as teachers should expect to be carefully selected, even though their interest in certification is secondary to another career at the time. Only those who are individuals of high capacity, who have acquired a substantial general education, whose mastery of their major and minor fields is unquestioned, and whose personal characteristics reflect the best ideals of our culture will finally be recommended for certification.

The selection of those who will finally be recommended for certification is a continuous process. It begins when the student first announces his intention of seeking certification. It continues informally through the early stages of his preparation. Immediately prior to the student-teaching experience, however, a formal effort is made to determine the appropriateness of the individual for teaching. Therefore formal application for permission to register for student-teaching courses must be made to the Director of Student-Teaching early enough to permit an adequate evaluation of the student prior to registration. This ordinarily requires three months if it is to be done without undue expense to the student and with a minimum of interruption of his studies. A description of this evaluation process may be secured from the Director of Student-Teaching upon request.

**Instructions to Guide Candidates for Teaching Certificates.** All students who intend to apply for certificates as teachers, are urged to inquire in the office of the Dean (118 McKay) for Guide Sheets to assist them in planning their college programs. It will be much easier to meet certification requirements under such guidance than it will otherwise. Because the teacher preparation program is under review and revision, the guides which were formerly printed in the catalog will temporarily be made available in mimeographed form.

## **SUBJECT MATTER PREPARATION OF SECONDARY SCHOOL TEACHERS**

### **A. Developing Composite Majors For Secondary School Teachers**

For guidance in selecting and completing a composite major, students may consult with the Chairman of the Department of Instruction, whose responsibility it is, under cooperative advisement with the academic departments, to administer the composite majors which cut across two or more departments. Secondary teachers may use the approved composite teaching majors of sixty or more hours as degree majors in the College of Education along with the professional major.

A composite major in three related fields will consist of: (1) a dominant subject in which a minimum of 24 hours will be required; (2) a related subject with a minimum of 18 hours required; (3) another related subject with a minimum of 18 hours required.

A composite major developed in two related fields will consist of: (1) a dominant subject in which the course work will amount to a minimum of 36-45 hours; (2) a related subject in which the course work will amount to a minimum of 24 hours.

In the following lists of courses the 24 hours of credit in any given subject may be selected either as the dominant subject material in a composite of three fields, or as the related subject material in a composite of two fields.

Many combinations may be selected from the fields described below. Early consultation with the Chairman of the Department of Instruction is recommended to assure students that their preparation is directed toward the greatest needs of the schools to be served.

### COMPOSITE MAJORS IN AGRICULTURE

#### **Agronomy:**

18 hour list: Agronomy 1, 20, 22, 25, 41, 102, 105 or 192.

24 hour list: Agronomy 1, 20, 22, 25, 41, 102, 105 or 107 or 192.

37 hour list: Agronomy 1, 20, 22, 25, 41, 102, and a minimum of 18 hours from the following: 101, 105, 107, 158, 159, 173, 192, 196.

#### **Animal Husbandry:**

18 hour list: Animal Husbandry 1, 7, 15, 32, and two courses from 21, 90, 154, 155, 156.

24 hour list: Animal Husbandry 7, 10, 11, 15, 32, and one course from 21, 90, 154, 155, 156, 190.

36 hour list: Animal Husbandry 1, 7, 10, 11, 15, 32, and twelve to fourteen hours from 21, 90, 154, 155, 156, 190.

#### **Horticulture:**

18 hour list: Horticulture 1, 3, 7, 102, 159; choice of an additional three hours.

### COMPOSITE MAJORS IN BIOLOGICAL SCIENCE

(Several combinations are possible. See descriptions above.)

#### **Botany:**

24 hour list: Botany 1, 2, 3, and ten additional hours selected from Botany 10, 18, 140, 150, 166, and Bacteriology 21.

45 hour list: Botany 1, 3, 10, 101, 102, 103, 106, 140, 150, 155, 180, 181, 183, 184. Bacteriology 21.  
Botany 18, 95, and 166 recommended.

**Zoology and Entomology:**

- 24 hour list: Zoology 11, 18, 45, 175, 182, 183, one additional class; Entomology 30.
- 36 hour list: Zoology 11, 12, 13 or 45, 18, 132, 157 or 158, 159 or 160, 175, 182, 183; Entomology 30.

**COMPOSITE MAJORS IN BUSINESS AND  
SECRETARIAL PRACTICE**

(Several combinations are possible. See descriptions above.)

**Accounting and Business Management:**

- 18 hour list: Accounting 1, 2; other courses selected. Elect eight hours from Accounting 26, 105, 150; Business Management 106, 160.
- 24 hour list: Accounting 1, 2; 14 hours selected after consultation from Accounting 26, 105, 150, 151, 152; Business Administration 106 and 160.
- 36 hour list: Accounting 1, 2, 149, 150, 151, 152; and eight hours from Accounting 26; Business Management 106, 160; Finance and Banking 151, 153, 154.

**Economics:**

- 18 hour list: Economics 1, 74, 161, and 5 additional hours in Economics.
- 24 hour list: Economics 1, 74, 161, 145, and 6 additional hours in Economics.
- 36 hour list: Economics 1, 74, 161, 167, 145, 246, 249 or Marketing 107, and 3 additional hours in Economics.
- Note: Economics 74 and Pol. Sci. 10 fill the American History and Government requirement.

**Secretarial Training:**

- 18 hour list: Secretarial Training 15, and 151, or equivalent; 24, or equivalent, 154, 31, 26, and 198.
- 24 hour list: Secretarial Training 15, and 151, or equivalent; 24, or equivalent; 154, 31, 26, and 198. Electives from Secretarial Training 160, 163, or 178.
- 36 hour list: Secretarial Training 15, 24, 26, 31, 151, 154, 155, 160, and 198. Elective from Secretarial Training 163, 110, or 125. At least 36 hours are required in this department.

**COMPOSITE MAJOR IN HOME ECONOMICS**

- 18 hour list: Clothing and Textiles 1, 2, 3 or 30, 55, 120, 125, 180, or their equivalents.
- 18 hour list: Foods and Nutrition 10, 11, 50, 112, 150, 152, or their equivalents.
- 24 hour list: Family Life and Home Management 5, 80, 161 or 163, 164, 165, 166, 172, 173, 181, 182, or their equivalents.

**COMPOSITE MAJOR IN LANGUAGE ARTS**

It is considered desirable that the 24 hour list of selected English courses be in all combinations of the composite majors in language arts. The recommended combinations are: English 45 hours; Speech 24 hours; Speech 45 hours, English 24 hours; Journalism 36 hours; English 24 hours; English 45 hours, Journalism 24 hours.

If students in English and speech desire to take a few hours in journalism to aid them in supervising the school paper or year book, the following courses are suggested: Journalism 61, 185, 186, 197.

**English:**

24 hour list: English 1, 2, 3, 21, 22; two courses from 41, 42, 43; and two courses from 71, 72, 73.

45 hour list: English 1, 2, 3, 21, 22; three courses from 133, 134, 135, 136, 82 or 182; three courses from 171, 172, 173, 174, 175; either 197 or 198.

**Speech:**

24 hour list: Speech 170, plus 22 hours selected from following courses: Speech 1, 11, 20, 22, 23, 24, 26, 41, 160, 161a, b, c, 162, 180.

44 hour list: Speech 1, 11, 22, 24, 26, 41, 160, 161a, b, c, (6 hrs.), 162, 170, 180, plus 6 hours electives.

**Journalism:**

24 hour list: Journalism 61, 62, 105, 106, 161, 162, 185, 186.

36 hour list: Journalism 61, 62, 105, 106, 161, 162, 171, 172, 179, 185, 186; eight hours from Journalism 1, 2, 26, 121, 268.

**COMPOSITE MAJORS IN MATHEMATICS AND  
PHYSICAL SCIENCES**

(Several combinations are possible. See description above.)

**Chemistry:**

18 hour list: Chemistry 14, 15, 16, (21 and 22 or 31.)

24 hour list: Chemistry 14, 15, 16, 151, (21 and 22 or 31.)

45 hour list: Chemistry 14, 15, 16, (21 and 22 or 31), 111, 151, 152, 153; 161 or 181, 162 or 182.

**Geology and Geography:**

18 hour list: Geology 1, 12, 106; one of Geography 20, 23; one of Geography 150, 155, 160, 165.

24 hour list: Geography 20, 23, 150; two of Geography 150, 155, 160, 165; elective, ten hours.

24 hour list: Geology 1, 12, 106, 117, 118; one of Geography 20, 23; one of Geography 150, 155, 160, 165.

45 hour list: Geology 1, 12, 106, 117, 118, 119, 130, 132, 171;  
one of Geography 20, 23; one of Geography 150, 155,  
160, 165.

### Mathematics:

18 hour list: Mathematics 11, 12, 13, 91.

24 hour list: Mathematics 11, 12, 13, 91, 92.

36 hour list: Mathematics 11, 12, 13, 91, 92, 93, 111, 112, 113,  
or 121, 122.

### Physics:

18 hour list: Physics 41, 42, 43, 21 or 26.

24 hour list: Physics 41, 42, 43, 121, 122, 123.

36 hour list: Physics 41, 42, 43, 121, 122 and twelve additional  
hours selected from upper division courses.

## COMPOSITE MAJORS IN MUSIC

### Instrumental Music Dominant Area:

The composite major in Music with instrumental music as the dominant area is somewhat flexible. Upon recommendation of the head of the Music Department certain outstanding strings, woodwind, or brass players may be permitted to substitute more private study on other instruments in the same family as their major instrument in place of Vocal Ensemble (3 hours), Instrumental Methods (2 hours), and Choral Conducting (2 hours). It is recommended that students with piano or organ as their major instrument do not elect a composite major for secondary schools unless they have had considerable experience on one or more band or orchestra instruments before entering college.

Major Instrument—Pass grade 4 c\*

Minor Instruments—Pass grade 1 b on one instrument in each family of orchestra (woodwind, brass, string) not represented by the major instrument.

Instrumental Ensemble—2 years ..... 6 hours

Band Conducting and Related Problems (Applied  
Music 198 ..... 2 hours

Orchestra Conducting and Related Problems (Applied  
Music 199) ..... 2 hours

Keyboard work in Theory of Music 21-23 ..... 3 hours

Keyboard work in Theory of Music 121-123 ..... 3 hours

Percussion playing ..... 1 hour

Instrumental methods ..... 2 hours

Vocal Ensemble (Chorus, Choir, Opera, Madrigal  
Singers) ..... 3 hours

Private or Group Vocal ..... 3 hours

Solfeggio taught in Theory of Music 21-23 ..... 6 hours

Solfeggio taught in Theory of Music 121-123 ..... 6 hours

Choral Conducting and Related Problems (Applied  
Music 197) ..... 2 hours

Harmony taught in Theory of Music 21-23 ..... 6 hours

Harmony taught in Theory of Music 121-123 ..... 6 hours

History of Music—1 year (Musicology 184-186) ..... 9 hours

**Vocal Music Dominant Area:**

Voice building and repertoire—Pass grade 4 c	
Vocal Ensemble—2 years (Chorus, Choir, Opera, Madrigal Chorus) .....	6 hours
Choral Conducting and Related Problems (Applied Music 197) .....	2 hours
Solfeggio taught in Theory of Music 21-23 .....	6 hours
Solfeggio taught in Theory of Music 121-123 .....	6 hours
Piano—Pass grade 1 c.	
Minor Instrument Workshop—Pass grade 1 b on one instrument in each family of orchestra (wood-wind, brass, string)	
Instrumental Ensemble .....	3 hours
Band Conducting and Related Problems (Applied Music 198) .....	2 hours
Orchestra Conducting and Related Problems (Applied Music 199) .....	2 hours
Keyboard work in Theory of Music 21-23 .....	3 hours
Keyboard work in Theory of Music 121-123 .....	3 hours
Percussion playing .....	1 hour
Instrumental methods .....	2 hours
Harmony taught in Theory of Music 21-23 .....	6 hours
Harmony taught in Theory of Music 121-123 .....	6 hours
History of Music 1 year (Musicology 184-186) .....	9 hours

\*Arabic numerals 1, 2, 3, etc. represent the amount of progress usually made in that number of years. The letters a, b, c, represent roughly the three quarters of the academic year.

## **COMPOSITE MAJOR IN PHYSICAL EDUCATION, RECREATION, AND HEALTH**

**Physical Education and Recreation:**

45 hour list: For men and women: Physical Education 51, 52, 53, 54, 55, 56, 88, 89, 130, 140, 141, 146, 154, and Recreation 80; and elect six hours from Physical Education 133, 134, 142, 175, 230, 235, 236, and Recreation 131.  
 For women: Physical Education 80, 81, 82, 83, 84, 85, 87.  
 For men: Physical Education 101, 102, 103, 104.

**Health:**

24 hour list: Health 21, 45, 50, 143, 157, 160, 195.  
 (Note: In addition to the above, the following courses are required: Zoology 11, Psychology 11, Physics 1, and a course in Chemistry.)

## **COMPOSITE MAJORS IN SOCIAL SCIENCE**

(Several combinations are possible. See description above.)

The major emphasis of social science in Utah secondary schools is history. Therefore, no combination of courses which omits history will be acceptable. The nineteen hour list for

history is a minimum requirement; the twenty-seven hour list is recommended. History 70 should **not** be taken by students in this field; the sequence, History 180, 181, 182, satisfies the graduation requirement in American History and Government.

**History:**

19 hour list: History 10 or 11, 12; 180, 181, 182.

27 hour list: History 10, 11, 12; 166; 180, 181, 182.

45 hour list: History 10, 11, 12; 166; 180, 181, 182; elective eighteen hours, **selected in consultation with the History Department.**

Note: A student who has taken History 20 or 21 before deciding on a composite major in social science should consult with the History Department on United States history courses to be taken in lieu of History 180, 181, and 182.

**Political Science:**

18 hour list: Political Science 10, 11; 12 or 15 (total 15 hours); with an additional course **selected in consultation with the Political Science Department.**

24 hour list: Political Science 10, 11; 12 or 15; with an additional nine hours **selected in consultation with the Political Science Department.**

45 hour list: Political Science 10, 11; 12 or 15; 101; with the remaining twenty-seven hours to include at **least one course from each of the six upper division areas of Political Science, selected in consultation with the Political Science Department.**

**Economics:**

18 hour list: Economics 1, 74, 161, 167.

24 hour list: Economics 1, 74, 145, 161, 167, plus one course.

36 hour list: Economics 1, 74, 75 or 249, 145, 153, 161, 167, 246.

Note: Economics 74 and Political Science 10 fill the American History and Government requirement.

**Geography:**

18 hour list: Geography 20, 23, 150; elective five hours.

24 hour list: Geography 20, 23, 150; five hours from Geography 155, 160, 165; elective ten hours.

39 hour list: Geography 20, 23, 150, 155, 160, 165; Geology 1; Botany 166, elective fifteen hours.

**Psychology:**

18 hour list: Psychology 11, 112, 115, 143.

24 hour list: Psychology 11, 112, 115, 121, 145.

36 hour list: Psychology 11, 112, 113, 115, 121, 145, 171, 273.

**Sociology:**

18 hour list: Sociology 11, 12; eight hours from Sociology 110, 114, 124, 128, 136, 152, 156, 160, 170, 172, 176.



24 hour list: Sociology 11, 12, 103 or 104; 182 or 186; eight hours from 110, 114, 124, 128, 136, 152, 156, 160, 170, 172, 176.

40 hour list: Sociology 11, 12, 103, 104, 182, 186, 188 or 189; sixteen hours from Sociology 110, 114, 124, 128, 136, 152, 156, 160, 170, 172, 176.

## B. Teaching Major and Teaching Minor

Students who do not elect a composite major may select a teaching major and a teaching minor. The teaching major shall consist of thirty-six to forty-five quarter hours of a subject taught in Utah high schools and approved by the College of Education. At least half of the academic major shall be upper division work. The teaching minor shall consist of not less than twenty-four quarter hours in a subject taught in the secondary schools of Utah. The twenty-four hour groups listed in the foregoing material are the courses approved by the department for the teaching minor. Students must have these or equivalents.

In a few departments where composite majors have not been developed there are listed single-subject teaching majors and teaching minors.

### Art Teaching Major, 44 hours:

Drawing (lower division), 6 hours; Design (lower division), 6 hours; History of Art, 9 hours; Crafts, 6 hours; Painting, 4 hours; Graphics, 2 hours; Sculpture, 2 hours; Commercial Art, 4 hours; Interior Design, 2 hours; Art Education, 3 hours.

### Art Teaching Minor, 25 hours:

Drawing (lower division), 4 hours; Design (lower division), 2 hours; History of Art, 2 hours; Crafts, 4 hours; Commercial Art, 2 hours; Art Education, 3 hours; Painting, 2 hours; Sculpture, 2 hours; Interior Design, 2 hours; Graphics, 2 hours.

### Languages:

Teaching Major: 30 hours upper division work. Two units of entrance credits or lower division courses 1, 2, 3, will enable a student to begin upper division classes.

First year .....	1, 2, 3
Second year .....	101, 102, 103
Third Year .....	111, 112, 113

Fourth year—To make upper division courses reach a total of 30 hours, selection may be taken from 121, 122, 123, 131, 132, 133. Consult with the department for equivalent courses.

Teaching minor: 20 hours upper division work, which must include 123 or its equivalent. Enough study and experience to make a success of teaching must be shown.

## **C. A Guide to Preparation for Secondary Teaching**

Heretofore the catalog has carried a full statement of steps necessary in preparing for secondary school teaching. This material is now available upon application at the office of the Dean of the College of Education.

## **TEACHER PLACEMENT**

Placement of teachers is a function primarily of the University Placement Office, which works in close collaboration with the College of Education. All students are required to register in the Placement Office as a prerequisite to registration for Student Teaching, whether they have positions already assured or not. Registration before leaving the campus enables the Office to be of Service at later dates as new opportunities or new needs arise.

## **THE LABORATORY SCHOOLS**

Director: Percy E. Burrup (114 McKay)

The Laboratory Schools (Kindergarten to the twelfth grade) are maintained by the College of Education to assist in the preparation of teachers and in the improvement of educational programs. Students may secure valuable experiences there as part of their preparation for teaching. The Laboratory Schools are also intended to furnish a setting for research in child development, in learning, in social processes, and in the planning and conducting of educational programs. Use of these facilities is under the supervision of the Director of Laboratory Schools, who should be consulted by faculty members and students who are interested. Individuals are requested to avoid going into classes or other facilities of those schools without making adequate clearance with the Director and the Principals.

In keeping with the laboratory functions of the school, students will frequently be under observation and study, and the classes in the school are subject to various kinds of experimental treatment for the purpose of improving instruction. Regardless of these functions, however, the instruction will always be kept at a high level of quality, since one of the principal purposes of the school is to demonstrate superior educational practices for the benefit of teachers-in-training and teachers-in-service.

Moral and religious education are a constant part of the instruction of these schools. Students are admitted under the assumption that they will adhere to L.D.S. Church standards for personal conduct, dress, and morality. Observance of these standards are requirements for continued enrollment in the Laboratory Schools. Students are also required to observe the Utah compulsory school attendance law.

Enrollment in each grade of the Laboratory schools is limited to the number of pupils who can be adequately cared for. Students are enrolled on the basis of priority of application and in conformity with the need for maintaining certain balances among

pupils which are important to the laboratory functions of the school. Applications for admission should be filed with the principal of the school to which admission is sought. Forms for this purpose are available in the office of each principal and also in the office of the Director.

Pupils who have been admitted may continue their schooling to the point of graduation from one of the colleges of the University if they so desire, make normal progress, and observe the standards of conduct of the school. They have all the advantages of the University plant, such as the use of the libraries, gymnasiums, laboratories, shops, athletic fields, auditorium, etc. The educational welfare of the students is safeguarded by an enriched curriculum.

### **Elementary Laboratory School**

The Elementary Laboratory School covers the range from the kindergarten through the first six grades.

A staff of well-qualified instructors, together with the facilities offered by the University and the assistance given by student teachers and special supervisors, provides a wide range of experiences for the children. Much attention is given to individual needs and interests and to the development of special abilities.

The school serves as a laboratory in modern school practice for the preparation of teachers in the field of Elementary Education and for the use and observation of current educational theory.

### **Secondary Laboratory School**

#### **JUNIOR HIGH SCHOOL**

Pupils completing the first six grades are regularly transferred to the Junior High School. Here departmentalization begins, permitting of variation in courses and a wide range of contact with expert instructors. A maximum of four units plus one year of religion credit will be allowed for ninth year work to count toward filling group requirements and toward graduation from the Senior High School for those pupils coming from schools which do not maintain a Junior High School.

#### **SENIOR HIGH SCHOOL**

Students completing the three years of work prescribed for the Junior High School are admitted to the Senior High School.

Students graduating from the Senior High School will be expected to complete 16 units in three years. Equal credit will be given in all subjects for equal amounts of time spent in the classroom. A course followed for thirty-six weeks with classes meeting five times a week will give one unit of credit. All the constants prescribed must be included in the program of each student.

### AIMS AND REGULATIONS

It is the purpose of the high school to develop in its students habits of regularity, punctuality, and industry. Willing and serious application to the tasks at hand is considered of fundamental importance in meeting life situations. It is the aim of the school to have students work vigorously during the day in order to develop the above qualities and to minimize home preparation of lessons. To achieve these aims, the following regulations apply to those enrolled:

(1) Students will be held accountable to the school at all times from the beginning of the school day schedule until the end. A student is expected to register for regular class work each period of the day. Permission should be obtained from the teachers and the principal if students are required to leave the school at any time during the day. Special permission should be obtained prior to the departure.

(2) All students are required to register for Religion. Students who fail to do satisfactory work in their courses in any department will not be permitted to remain at this school.

(3) Students are required to take the regulation courses in physical education during residence at this school. Students are released from this requirement only upon statement of physical disability signed by a physician. Satisfactory grades in physical education courses are required for graduation.

### HIGH SCHOOL ACTIVITIES

Under the direction of the faculty and the student body organization, an adequate program of athletic and social activities is provided for the junior and senior high school students.

All high school groups have regular social gatherings and recreational activities under faculty supervision and guidance. They have activities in athletics, debating, public speaking, and essay writing. Each year the school produces several dramatic and musical programs. The school is a member of the State High School Debating Association and the Utah High School Activities Association. In addition to these opportunities for extra-class activities, a regular High School Student Body organization is maintained with the various activities that naturally are sponsored by such organizations. The high school students have also the advantage of participation in the regular activities of the University student body.

### CREDIT

Those classes which meet five days each week for a full fifty minutes, and which continue for the full school year of thirty-six weeks of actual class work carry one unit of credit.

Students who register late or who discontinue before the end of the school year or miss a portion of their work during

the school year can receive no higher grade than "Incomplete" until the required work of the course is completed. An incomplete grade carries no credit. Such a grade may be removed within the following six-week term and credit received.

### ACCREDITATION

Brigham Young University High School meets all requirements of the Utah State Board of Education. It is accredited by the Northwest Association of Secondary and Higher Schools.

## Secondary School Curricula

### JUNIOR HIGH SCHOOL

#### Core Curricula

It is the philosophy of the Junior High School that certain areas of work should be organized around student needs into a core program. By having students remain with one teacher for a two-hour period, it is believed that greater strides may be made in guiding the pupil in solving his personal problems, in integrating his school activities with those which he carries on in the community, in developing a wholesome personal outlook, and in the development of basic skills and acquisition of factual knowledge commensurate with his level; therefore, core curricula have been set up in the seventh, eighth, and ninth grades.

#### 7th Grade Subjects:

Constants: Physical Education, Core Curriculum (English, Social Studies, and Religion), Mathematics, Music or Band, Art, Speech, Industrial Arts, Homemaking.

#### 8th Grade Subjects:

Constants: Physical Education, Core Curriculum (English, Social Studies, and Religion), General Science, History, Mathematics, Music or Band, Speech, Art, Industrial Arts, Homemaking.

#### 9th Grade Subjects:

Constants: Art, Physical Education, Core Curriculum (English, Social Studies, and Religion), General Science, Mathematics, Music or Band, Homemaking, Industrial Arts.

### SENIOR HIGH SCHOOL

Students desiring to graduate from the B.Y.U. High School and to qualify for college entrance at the same time must complete the following requirements.

1. A total of sixteen units is required in grades 10, 11, and 12. A unit of credit is given for any subject that is taken five times a week for 36 weeks.
2. Two years of Physical Education must be taken while in the Senior High School, one of which should be taken in the sophomore year. Students who have some physical disability may be excused from this requirement if they have a statement from their family doctor confirming the fact of their disability.

3. Either Algebra or Geometry.
4. Three units of Language Arts.
5. U.S. History and either Problems of Democracy or Development of Civilization.
6. One unit selected from Chemistry, Physics, Physical Science, or Biology.
7. One semester each of two of the following courses: Eugenics, Physiology, Senior Problems.
8. While at Brigham Young High School, the prescribed courses in Religious Education must be followed satisfactorily by all students. One Religion class each year is required.

Special courses may be planned for those high school students who do not intend to be officially graduated from high school or who do not intend to go to college.

Senior students who make no lower than a "B" grade in any of their high school classes may, if it is deemed advisable, secure permission from the Principal to take a maximum of 6 quarter hours of college credit each quarter. Under no circumstances may graduation requirements be completed with less than four classes in the Senior year.

### SENIOR HIGH SCHOOL COURSES

Subject	Days		Year Taken	Credit
<b>Art</b>	5	Elective	10-12	1 unit
<b>Industrial Arts</b>	5	Elective	10-12	1 unit
<b>Business</b>				
Shorthand, Elem.	5	Elective	11-12	1 unit
Shorthand, Adv.	5	Elective	11-12	1 unit
Typing, Elem.	5	Elective	10-12	1 unit
Typing, Adv.	5	Elective	10-12	1 unit
Bookkeeping	5	Elective	10-12	1 unit
<b>Language Arts</b>				
Composition, Grammar, and American Literature	5	Constant	12	1 unit
Grammar and Literature	5	Constant	10	1 unit
English Literature	5	Constant	11	1 unit
<b>Homemaking</b>				
Home Making	5	Elective	10-12	1 unit
Home Living	5	Elective	10-12	1 unit
Home Management	5	Elective	12	1 unit
Adv. Foods and Clothing	5	Elective	11-12	1 unit
<b>Language</b>				
French 1 or 2	5	Elective	10-12	1 unit
Spanish 1	5	Elective	10-12	1 unit

**Mathematics**

Algebra I	5	Elective	10-12	1 unit
Geometry*	5	Elective	10-12	1 unit
Arithmetic (Bus.)	5	Elective	10-12	1 unit
Basic Skills	5	Elective	10-12	1 unit
Algebra II (1 Sem.)	5	Elective	10-12	.5 unit

**Music**

Chorus	5	Elective	10-12	1 unit
Band	5	Elective	7-12	1 unit

**Physical Education**

Physical Ed. (Girls)		Constant	10-12	1 unit
Physical Ed. (Boys)		Constant	10-12	1 unit

**Religious Education**

Religion 1	5	Constant	9	1 unit
Religion 2	5	Constant	10	1 unit
Religion 3	5	Constant	11	1 unit
Religion 4	5	Constant	12	1 unit

**Science**

Physics*	5	Elective	11-12	1 unit
Pers. Hygiene (1 Sem.)	5	Constant	11-12	.5 unit
Eugenics (1 Sem.)	5	Constant	11-12	.5 unit
Chemistry*	5	Elective	11-12	1 unit
Botany (1 Sem.)	5	Elective	10-12	.5 unit
Zoology (1 Sem.)	5	Elective	10-12	.5 unit
Biology	5	Elective	10-12	1 unit
Physiology	5	Elective	12	.5 unit

**Shop**

Industrial Arts I, II	5	Elective	10-12	1 unit
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**Social Science**

U.S. History	5	Constant	11-12	1 unit
World History*	5	Elective	10-12	1 unit
Problems in Democracy	5	Elective	10-12	1 unit
Senior Problems	5	Elective	12	.5 unit

**Speech**

Speech	1-5	Elective	10-12	1 unit
Advanced Speech	5	Elective	11-12	1 unit
Speech Workshop	5	Elective	10-12	1 unit

\*These subjects are only partially elective as either one or the other in each group must be taken.

## College of Family Living

Marion C. Pfund and —————, co deans (211 E and 225 ESC)

The following departments are in the College of Family Living.

Clothing and Textiles  
Economics and Management of the Home  
Food and Nutrition  
Homemaking Education  
Housing and Design  
Human Development and Family Relationships

In the selection of a name for this college, the older and more familiar name of Home Economics has been replaced by that of Family Living. The latter is believed to be more inclusive and more indicative of the broad objectives of the college. The term embraces the economic aspects of the home but also reaches out to include relationships among the members of the family as they live within the home and the community.

The College of Family Living is designed to provide educational experiences which prepare young men and women for homemaking, for the professions related to homemaking, for the enrichment and strengthening of family life, and for the responsibilities of family members within the community. These aims are based upon the conviction that abundant living evolves primarily from the happy family. Such objectives have their roots deep within the culture of the L.D.S. people. Family life is the matrix of spiritual development, the foundation of society, and the basic unit of the Kingdom of God.

The present objectives of the college concern not only the students registered in it, but also all other women and men in the University. We hope that every student will elect at least one course which will so enrich his life that he will become a better family member. To this end many courses are particularly adapted to meet the needs of students in the university who are not members of the College of Family Living.

The experiences of family living involve the discoveries of science, the insights of the humanities and the fine arts, and the inspiration of religion and recreation, all taught in other colleges of Brigham Young University. Their resources are used liberally in our endeavor to integrate and organize educational experiences which increase human capacities to participate in effective family and community living.

The curriculum of the college is geared partially to the cultivation of competency in coping with the vital daily activities involved in homemaking: the creation and maintenance of an environment of beauty within the home; the preparation of nutritious meals; the effective use of the resources of energy, time, and money; the creative use of leisure and the capacity to meet the stresses and strains incident to crises. The broad philosophy of



family living, however, goes far beyond the learning of skills, important as they are. The creation of healthy families and happy homes is one of the foremost challenges faced by our society. The daily tasks involved in parenthood constitute one of life's greatest sources of joy, also one of its most important responsibilities.

To the extent that family life of today is understood, the course offerings in the College are related to those needs. Within the framework of the curriculum the entire cycle of family life from infancy to old age is considered. The expectancy of early marriage and parenthood and of large families is traced and discussed. The importance of the role of men as partners in home-making is increasingly emphasized. The prolonged period in the lives of men and women after children have been reared becomes part of the thinking and planning of the college student. The many patterns of family living, each with its own economic level, educational background, and cultural heritage, are considered with a view toward the contribution each can make to our families of today. The important task of preserving and enhancing the integrity of the family is given a primary place. Educational experiences are directed toward the realization of increased understanding of human development and human relationships and toward the realization of increased maturity in personal, family, and community living. The ever-expanding demands made on men and women to participate and assume leadership in the life of the community are stressed. To these ends the College of Family Living endeavors to serve all men and women students in the university.

The course offerings are also designed to supply actual material necessary to prepare students for selected professional service: teaching in specialized areas within educational institutions, working in community child welfare agencies, departments of recreation, and youth organizations; or working in the field of dietetics. The degree of Bachelor of Science or Bachelor of Arts is given to graduates of the college.

The philosophy of the College of Family Living will find expression in the laboratories, classrooms, and offices soon to be provided within a new Family Living Center. The building itself will be a "silent teacher" of the total program it is designed to serve, reflecting an integration of knowledge and the search for truth concerning the creation and maintenance of healthy home and family life. The atmosphere of the Family Living Center will emphasize most appropriately the special forces arising out of the L.D.S. cultural heritage regarding the family, a symbol in itself of the spiritual ideal which was so significant in the motivation of its creation.

An important aspect of the College of Family Living is its relationship to the university student housing program. Through cooperation with the office of the Dean of Students and the directors of student housing, members of the faculty of the College of Family Living serve as consultants to the students living in the unique housekeeping apartments, Heritage Halls, which house nearly 1000 young women; to the head residents; and to other administrators of dormitories and cooperative houses. One member

of the staff of the College of Family Living is Resident Housing Consultant in Home Economics. She has a laboratory and office in Rogers Hall, one of the residences in the Heritage Halls group. Students may consult her any hour of the day for help with such problems as buying, meal planning, meal preparation, clothing construction, and entertaining. Thus, through out-of-classroom informal experiences, students are helped to meet problems involved in the daily tasks of home management and group living, including the areas of recreation and of personal and social development.

## College of Fine Arts

Gerrit de Jong, Jr., Dean (240C)

The following departments are in the College of Fine Arts:

Art

Music

Speech and Dramatic Arts

The policy of the University has always provided for a liberal patronage of the fine arts. A constantly growing desire to offer greater opportunities for better coordinated academic and professional growth to those whose inclinations and talents lead them into the various fine arts resulted in the organization of the College of Fine Arts in 1925.

With exceptionally well-prepared faculties, who have received the benefits of extended study in recognized schools and art centers, and adequate physical equipment in all departments, the College of Fine Arts has become favorably known for the artistic and academic work done under its direction.

Any course offered in this college that leads to the baccalaureate degree is the cultural equivalent to other college courses offered in the University, differing from them mainly in respect to the emphasis placed upon the study of the fine arts.

The Art Department offers curricula in Painting, Sculpture, Crafts, Interior Design, Commercial Art, Graphics, and Art for Teachers in the Elementary and Secondary Schools.

The Music Department lists courses in Theory of Music; Musicology; Applied Music, both Instrumental and Vocal; Music Education, for Elementary and Secondary School Teachers; and General Music, for non-music majors.

The Department of Speech and Dramatic Arts lists courses of study in Public Speaking, Radio and Television, Theatre and Dramatic Art, Speech and Hearing Rehabilitation, and General Speech, for teachers in Secondary Schools.

### MAJORS AND MINORS

Majors are selected from the work offered in the above-mentioned departments; minors may be selected from them, or from other departments in the University which offer allied work.

Students graduated from the College of Fine Arts receive the degree of Bachelor of Arts.

## College of Humanities and Social Sciences

Antone K. Romney, Acting Dean

The following departments are in the College of Humanities and Social Sciences:

- Archaeology
- English
- Geography
- History
- Journalism
- Modern and Classical Languages
- Political Science
- Psychology
- Sociology

The humanities are those fields of inquiry which concern themselves primarily with the intellectual and artistic creations of man in his attempt to define and appreciate the best that has been thought and said in the world. The social sciences are those closely related fields of inquiry having to do with the social and governmental conduct and relations of man. The humanities and the social sciences are therefore related disciplines whose purpose is to help man live in the most intelligent and satisfying manner.

There are two large purposes for which the instructional program is designed. One is the achievement, by as many as will have it, of a broad and liberal education, which will enable those who obtain it to receive in the fullest measure the values to be found in the complex civilization of today and to contribute to the enlargement of those values in an effective and acceptable manner. The other is the preparation of a more limited group as qualified contributors to the discovery of additional truth to add to our present heritage and as capable professional participants in the regular productive affairs of daily living.

Courses intended to contribute to the first purpose are offered as a service to all students in the University. Career programs for those who choose to do their major work in this college are offered in the Departments of Archaeology, English, Geography, History, Journalism, Political Science, Psychology, Modern and Classical Languages, and Sociology.

### LOWER DIVISION REGISTRATION

Students entering the college will have been guided to some extent through the facilities of the Counseling Service. Faculty advisors in the College will take up this function upon entrance into the College. The objective of this advisement is to assist the student in such selection of studies as will enable him most wisely to choose his major field and to obtain an adequate foundation for it within the pattern of general education prescribed by the University.

## DEPARTMENTAL REGISTRATION

When the student has selected a major field, he may register in a specific department, and in that event will have an advisor who is a member of the faculty of that department. His advisor will assist him in planning his studies to satisfy the general graduation requirements of the University as well as those of his major department.

## PRE-LEGAL COURSE

Advisors: Stewart L. Grow, Jay B. Hunt, J. Kenneth Davies.

The Association of American Law Schools, which is composed of the leading law schools in this country, makes no specific requirement concerning the content of pre-legal courses of study. It does suggest that a college student should be given a thorough mental training in fundamental subjects. A pre-legal student should lay a foundation for a broad culture, develop intellectual discipline, and cultivate professional standards of study. The more important problems confronting lawyers, judges, and legislators are basically economic, political, and social. A law student should acquire a knowledge not only of legal doctrine and of the judicial processes but also of the above-mentioned fields of study.

The following important advice given by a leading law school may well be brought to the attention of pre-legal students:

"Few ideas are more fallacious or harmful than the notion that it is possible to dawdle through high school and college and then make the adjustment to higher standards promptly upon entering the professional school. Essential habits of concentration and effective methods of study must be acquired and developed during the pre-legal years. Careful reading and the constant exercise of practice in writing should be cultivated assiduously . . . . A large proportion of failures in the professional school may be traced directly to the neglect of opportunities in school and college."

In general, the lawyer's range of knowledge should be as broad as he can make it, and, from that standpoint, there is no single pre-law program that can be called the best one for the purpose. The student should bear in mind that the prime requisite of a successful lawyer is a well-disciplined mind. It must be readily capable of embracing complex situations, identifying subtle distinctions, and appraising arguments. It must be able to weigh opposing considerations and be capable of sustained effort over long periods of time. To produce such a mind, the college schedule should include courses intended to expand the mental powers of a student to the utmost and to bring about precision of thought.

In addition to the courses in general education prescribed by the university in the biological and natural sciences it is suggested that a satisfactory pre-legal course might be selected from the

following fields: English, Political Science, History (with special emphasis on American and English constitutional history), Economics, Accounting, Psychology, Public Speaking, Sociology, and Mathematics.

Because of the growing tendency of law schools either to recommend or demand that the entering student have a B.A. or B.S. degree, the pre-legal student should plan his freshman and sophomore programs toward the acquisition of a bachelor's degree.

## College of Physical and Engineering Sciences

Harvey Fletcher, Acting Dean (294 PS)

The College consists of six departments, as follows:

Air Science  
Chemistry and Chemical Engineering  
Engineering Sciences  
Geology and Geological Engineering  
Mathematics  
Physics

The College of Physical and Engineering Sciences is unique in bringing together in to one college the various branches of fundamental physical sciences and of engineering. It provides the fundamental training and stimulation for those who wish to have a career in teaching, industrial work, or fundamental research in any of these fields. It also provides for a large number of service and cultural courses needed by students enrolled in the other colleges of the University.

### ENTRANCE REQUIREMENTS

In addition to having fulfilled the general entrance requirements of the University, a student entering the College of Physical and Engineering Sciences should have completed successfully the following high school courses:

3 units of English  
3 units of Mathematics  
1 unit of Physical Science

Students who have not met these requirements must take extra remedial courses as prescribed by the Chairman of the department of his selected major before, or concurrently with, the regular course of studies outlined for his department.

The outline of courses in the Engineering Sciences constitutes a five-year program and leads to the degree of Bachelor of Engineering Science. Such a five-year program is given for the following six branches of Engineering Science: Acoustical, Chemical, Civil, Electrical, Geological, and Mechanical Engineering Science. During this year (1955-56) the complete courses for all five years for all of these departments will be given.

All of the other departments, except Air Science, have a four-year program which leads to the degree of Bachelor of Science or Bachelor of Arts. A student is not permitted to graduate with a major in Air Science.

A program of courses and the requirements for graduation are given under each department.

## College of Recreation, Physical and Health Education, and Athletics

Jay B. Nash, Acting Dean  
(200 Fieldhouse)

The following departments and areas are in the College of Recreation, Physical and Health Education, and Athletics:

- Recreation
- Physical Education — Men
- Physical Education — Women
- Scouting
- Health Education and Safety
- Intercollegiate Athletics and Intramural Sports

In bringing together the educational areas composing this college, Brigham Young University is following one of the latest and most highly approved trends in the universities of our nation in view of the changes taking place in our complex civilization in the areas of recreation, scouting, health, safety, physical education, and athletics.

The trend to urban life has adversely affected the life of children, but in a sense it has so affected all people. Store windows displaying highly desirable goods tempt children with time on their hands and with limited opportunities for play and recreation to veer dangerously near the precipice of uncontrollable delinquency. A recent report of the Judicial Committee of the United States Senate indicates that of the children born this year one out of ten will be brought to a hearing over violation of law. The problem of delinquency will never be solved if the point of correction or prevention waits until an act is committed. The roots of law-abiding behavior are planted early, probably before the age of ten and most often in the home atmosphere.

Health practices must be established early in life and they, too, must be established in the home. Although the mastery of communicable diseases now seems in sight, new diseases caused by tension, worry, and fear which lead to breakdown are rapidly coming to the foreground.

Education must prepare young people to live. Only about 7 percent of the young people will go into the professions—law, education, or medicine. The other 93 percent will be in relatively humble positions and living in small homes with large families. This group will be the backbone of the nation—the common people whom Lincoln loved so much. Our schools must prepare young people to live full lives on the one hand and yet in an even more important way on the other hand to help lead their children in full living.

The schools have the responsibility of education for all. Brigham Young University is charged with the responsibility of leadership more specifically than other universities of the nation.



The Mormon Church has a rich heritage in areas of health practice and in community, church, and family recreation. Leadership has been exerted through scouting programs and the Mutual Improvement Association. Both stake and ward buildings have been built with a rich recreation program in mind. Brigham Young University must not only show interest in leadership of its young people—it must be out in front.

Courses are organized to meet state certification requirements in Utah and other states. A major and minor are offered in the fields of Physical Recreation, Recreation, and Health. In addition to this, there are a minor in Dance and a three-year pre-physical therapy curriculum.

The activities of the College are organized around the following departments:

**Department of Recreation.** The Department of Recreation has a number of basic functions if it is to fulfill its responsibility to the University, the Church, and the nation. Among the responsibilities specifically recognized are: (1) to prepare professional recreational leaders, (2) to prepare voluntary leaders in wards and communities, (3) to provide recreational activity for students and faculty. These are responsibilities which are recognized by very few universities, but which Brigham Young University must recognize.

**Department of Physical Education.** The Department of Physical Education is, in fact, two departments—one for men and one for women. One objective is the training of leaders in Physical Education and coaches. Courses are also given for the student body and a vigorous program of a large variety of activities is sponsored. The number of young men physically fit to serve the nation during World War II challenged the nation. After the war the forgetting process set in rapidly. It is fortunate that vigorous training not only produces men to defend the nation but also to carry on in time of peace.

**Department of Scouting.** The objective of the Department of Scouting is to encourage scouting in all of its various phases and aspects. Specifically, it is to prepare professional scout leaders and to assist in the training of volunteer leaders in various wards and communities within the state and nation. To implement this long-term and short-term courses will be offered on the campus and "in-service" and "pre-service" courses in various areas will be provided off-campus, particularly for scoutmasters and volunteer workers. More professional leadership is needed in scouting and the University proposes to meet this need on as large a scale as it is capable of.

**Department of Health Education and Safety.** In the Department of Health Education and Safety emphasis is placed on the educational aspects of health and safety. The University Health Center, the home, physicians and dentists, the Public Health Department, and many other groups have a responsibility in health. The Health curriculum deals primarily with the instruction in health. Stress is placed on personal hygiene, sanitation, nutrition, and personal safety practices. Courses will be given for all fresh-

men and courses are given for teachers going to the public schools of the state.

**Intercollegiate Athletics and Intramural Sports.** It is the determination of Brigham Young University to make all athletics contribute to the educational atmosphere on the campus. The University has no coaches as such. All coaches are faculty members and are judged upon the basis of wholesome leadership and good teaching. Brigham Young University is a member of the Skyline Conference. The rules of the conference forbid commercialization of athletics or encouraging unethical practices. The University is determined that the abuses which have crept into college athletics shall not be allowed on this campus.

A vigorous program of Intramural Sports is organized. Scores of teach participate in such recreation as basketball, tag football, tennis, badminton, volleyball, horseshoes, archery, cross-country running, handball, golf, swimming, wrestling, bowling, gymnastics, squash, track, and table tennis.

A special evening once a week is set aside so that the townspeople may participate in various sports and games.

## Graduate School

George H. Hansen, Dean

### General Information

#### PURPOSE

The Graduate Division of Brigham Young University was established as an administrative unit in 1922, 47 years after the founding of the Brigham Young Academy in 1875. The objective of graduate study was then stated in these terms: "The essential aim . . . is to develop the power to do independent work and to encourage the spirit of research. Each candidate is expected to possess a broad general knowledge of his major subject with less detail in the case of his minor subjects."

Educational institutions such as Brigham Young University reflect the aspirations and problems of the American people. They carry the ideals, dreams, and hopes of democracy from generation to generation. Their ranks must be filled with trained men and women—trained in the skills, the arts, and the sciences and dedicated to a higher spiritual understanding through which all men can work for the common good.

#### FACULTY OF THE GRADUATE SCHOOL

In the early years, all graduate registration was made through a Committee on Graduate Work. The first Chairman of Graduate Work was appointed in 1925. Since the establishment of the Graduate School in 1929, all graduate study has been under the direction of a Dean.

The faculty of the Graduate School is composed of those who hold the rank of professor or associate professor in all departments offering graduate degrees. Other regular members of the teaching staff of the University are eligible to teach graduate courses and serve as chairmen and members of students' Special Committees if approved by their respective departments and the Graduate Council.

The chief administrative body of the Graduate Faculty is the Graduate Council, which consists of (1) the President of the University, the Dean of the Graduate School, and the Director of Research, ex officio; (2) four members of the Graduate Faculty elected at large for terms of three years; (3) eight members of the Graduate Faculty, one elected from each of the eight Colleges in which there are departments offering graduate work; and (4) one member elected to represent the Division of Religion. The Graduate Council is empowered to act for the Graduate Faculty on all student petitions and on departmental requests for approval of faculty members for graduate instruction and supervision. It is the responsibility of the Graduate Faculty to formulate and recommend requirements for all graduate degrees and to recommend regulations and facilities to promote the scholarly activities and research interests of graduate students.

### LIBRARY FACILITIES

The Heber J. Grant Library contains the general library and certain special collections. It includes over 225,000 books, government documents, pamphlets, and bound magazines. Approximately a thousand periodicals are received regularly. Some of the outstanding collections available to students are the Boyle Collection in Geology, the Gates Collection on the History, Archaeology and Linguistics of the Maya Area, the Robert Burns Collection, and the National Welsh Library.

**Special Libraries.** The Albert C. Boyle Science Library, housed in the Eyring Physical Science Center, includes books and periodicals in physical science, radio, engineering, photography, and antiquities, and an extensive map collection.

The facilities of the L.D.S. Genealogical and Historical Library in Salt Lake City, which contains over 500,000 titles, are available by special arrangement, as are the collections of Utah and Mormon materials in the L.D.S. Church Library in the same city.

### SUMMER SESSIONS

Graduate students who do a part of their work at the University during the summer will find a wide range of graduate courses suited to their purposes. A full quarter of work is offered in the summer school, which is divided into two terms so that students may attend only part of the summer if they desire. Graduate students may register for a maximum of nine credit hours per term.

### SCHOLARSHIPS, ASSISTANTSHIPS AND FELLOWSHIPS

**Scholarships.** The University has established the following scholarships for graduate students:

- 10 scholarships which provide for free tuition and a \$500 cash award.
- 10 scholarships which provide for free tuition and a \$300 cash award.
- 30 scholarships which provide for free tuition.

These scholarships are awarded on the basis of high academic achievement and are available to students in any area of graduate study. Recipients must possess a baccalaureate degree at the beginning of the period for which the scholarship is granted and be a candidate for a higher degree. Applications for the academic year beginning in September should be filed by the preceding March 1. Application forms may be obtained from the office of the Dean of the Graduate School.

**Teaching and Laboratory Assistantships.** Many departments employ graduate students as teaching or laboratory assistants. Assistantships are awarded on the basis of scholastic accomplishment and competence for service. Remuneration is based on the time which is devoted to teaching duties. The stipends vary from \$125 to \$1800 per year, not including tuition and fees. Application forms and detailed information can be obtained by writing

to the chairman of the department in which the applicant wishes to become an assistant.

**Research Assistantships and Fellowships.** A substantial number of research assistantships and fellowships are available at Brigham Young University. Recipients work part time under the supervision of a faculty member on research projects which are supported by University, government, or private sources. The awards vary from \$1,200 to \$1,800 per school year, depending upon the type of research and the amount of time devoted to it. Students interested in appointments to research assistantships or fellowships should direct inquiries to the Director of Research or to the chairman of the major department.

### **Admission Procedure**

A bachelor's degree or its equivalent from an accredited college or university is required for admission to the graduate school. Admission is by means of registration permits issued by the University Office of Admissions; application forms will be furnished by that office on request. Official transcripts of credit covering all work at institutions attended must be filed with the Office of Admissions before registration permits can be issued.

Permission to register for graduate work does not in itself imply that the student is accepted or will be accepted as a candidate for an advanced degree. Application for acceptance as a degree-seeking student is a separate and subsequent step to be initiated by the student himself at the Office of the Graduate School.

### **Admission to the Graduate School On a Degree-Seeking Basis**

#### **APPLICATION**

After a student has been officially admitted to graduate study by the University Office of Admissions, he is eligible to apply for classification as a degree-seeking student. This is accomplished by (1) completing the application form furnished by the Graduate School Office, and (2) submitting statements of recommendation from three persons who can certify to his fitness for graduate work. At least one recommendation must be from an instructor in the student's major field and at least one from an instructor outside of that field. The recommendation forms are provided by the Graduate School.

As soon as credentials are complete, they will be sent to the Chairman of the Department in which the student proposes to do his major work. There the applicant's fitness for graduate work is considered and recommendations are made if extra course work is required to make up background deficiencies. Such supplementary work may be taken in the University after registration for graduate study. Foreign students especially are urged to correspond with the head of the department concerned to ascertain whether their preparatory work will be acceptable to the department and the Office of Admissions.

### GRADUATE RECORD EXAMINATION

All students applying for admission to the Graduate School on a degree-seeking basis are required to take the Graduate Record Examination before registration or early in the first quarter of study. These examinations are administered in Utah and elsewhere four times yearly. For information on dates, registration, and costs, write to Educational Testing Service, Box 9896, Los Feliz Station, Los Angeles 27, California.

The Graduate Record Examination is an educational achievement test for persons entering any field of graduate study. The results are charted and compared with averages of selected groups of graduate students. If a student receives a low score, he may not be admitted as a degree-seeking candidate until he has satisfactorily completed one quarter of graduate work at this University.

### General Requirements for Advanced Degrees

#### SPECIAL COMMITTEE

The student's program and his thesis are pursued under the direction and supervision of a Special Committee, selected by the student after he has been admitted to the Graduate School as a degree-seeking candidate. The composition of the committee is approved by the head of the department in which the student is to do his graduate work. All faculty members who offer courses carrying graduate credit are eligible to serve as chairmen and members of Special Committees. The candidates shall secure the committee members' acceptances and report them to the Dean on the appropriate form within six weeks of the date of first registration as a degree-seeking student.

At the end of each quarter the Special Committee will report to the Dean of the Graduate School whether the work of the student has been satisfactory during the quarter.

A student may change the membership of his Special Committee with the approval of all members of the newly constituted committee and the Dean of the Graduate School. After such a change he reviews his entire program with the new committee.

#### CREDITS

**Amount and Distribution.** The master's degree requires the completion of 45 or more quarter hours of credit, at least 30 hours of which must be approved by the Special Committee prior to registration. Courses shall be in the 200 or 300 series, except that up to 15 hours of upper division (100 series) credit may be used if the courses are approved by the Special Committee at the time of registration. Such courses shall be designated by an asterisk (\*) on the student's registration card and his transcript.

At least 23 of the hours must be in the major field and at least 15 in a minor field; at least three-fourths must be of grade B or better, and none may be of a grade lower than C. At least

15 hours in the major field and 10 hours in the minor field must consist of courses for which there is a systematic body of subject matter identified with a given course number such as ordinarily constitutes a formal course. Seminars, special readings, and special problems may not be included in these totals.

**Graduate Credit for Seniors.** If during the last quarter of the senior year, a candidate for a baccalaureate degree finds it possible to complete all requirements for such a degree with a registration of fewer than sixteen quarter hours of undergraduate credit, he may register with the Dean of the Graduate School for graduate credit to the extent that the total registration shall not exceed sixteen quarter hours during the quarter. Written verification that all requirements have been met must be obtained from the appropriate undergraduate dean and presented to the Dean of the Graduate School prior to such registration.

**Transfer Credit.** Graduate work up to 15 quarter hours may be transferred from other institutions upon the approval of the student's Special Committee and the Graduate Council. Forms for petitioning for such transfers are available in the office of the Graduate School. Credit transferred must represent work which is a fair and reasonable equivalent of corresponding work in this University. Extension credit acquired at other institutions and credit gained by special examination and correspondence will not be accepted.

**Extension Credit.** A graduate student may earn credit toward the master's degree for courses given through the Extension Division of Brigham Young University provided such courses are approved by his Special Committee and by the Dean and the Graduate Council. A student wishing graduate credit for an approved extension course should request the Extension Division to inform the Graduate Office of credit earned.

#### **Limitation of Transfer, Extension, and Upper Division Credit.**

Not more than 15 quarter hours of combined extension, starred upper division and transferred work may be applied toward the requirements for an advanced degree, and such credit **cannot** be used to reduce the residence requirements to less than the minimum of 30 quarter hours to be completed on the Brigham Young University campus.

### **ENGLISH 201**

Students whose ability to write clearly and correctly is not deemed satisfactory by the department involved are required to enroll in English 201, a non-credit course in Problems of Thesis Writing. The course is equivalent to two credit hours and is regarded as part of a student's registration for that amount. It should be taken at the earliest possible time.

### **RESIDENCE**

Of the 45 quarter hours required for the master's degree, at least 30 quarter hours of approved courses must be taken in residence on the Brigham Young University campus. Residence

shall be defined as registration and attendance in courses, seminars, field classes, or other types of instruction conducted on the campus of the University during a regular quarter.

### STUDENT LOAD

No candidate for the master's degree will be permitted to register for more than 16 quarter hours in any one quarter. Teaching assistants and others employed approximately one-half time should limit their loads to not more than 12 quarter hours, and full-time employees to not more than 5 hours. Experience has shown that because of the intensive character of graduate work and the academic grade-point average required, it is usually advisable for graduate students to limit their programs to something less than the maximum permitted when employed on a full or part-time basis.

### MASTER'S THESIS

**Procedure.** The prospective candidate for the master's degree enrolls for a thesis (course 300) in his major department, preferably two quarters before the scheduled completion of his program. At the beginning of his research or creative work the student must provide the chairman of his Special Committee with an outline or prospectus and secure approval on a form provided by the Graduate School. He is required to complete at least one full quarter of residence study after the date on which the form and prospectus are delivered to the Dean. A complete, signed, but unbound copy of the thesis must be on file in the office of the Graduate School and with the Chairman of the Special Committee 15 days prior to the final examination and not later than 30 days before graduation.

**Style and Form.** Kate Turabian, *A Manual for Writers of Dissertations*, shall be used as the guide. Other manuals may be used for supplementary help where needed, but the Turabian manual shall take precedence in any case of difference.

**Paper.** The first copy of the thesis must be on 16 pound bond, with 100 per cent rag content, with water-marked margins, 1¼ inch on the left and 1 inch in the other margins, the grain of the paper to run the long way of the page. Other copies should be on 100 per cent rag content bond paper, not lighter than 13 pound, and may be without the water-marked margins.

**Carbon Copies.** Carbon copies must be made with Carter's Midnight Carbon Paper or equivalent, carbons to be changed often enough for acceptable legibility.

**Typing.** Typing must be done with standard elite or pica type, but not with both; spacing may be either 1½ or double.

**Reprints.** Should the thesis be published, reprints may be substituted for the typed copies, provided they are in acceptable form for binding.

**Binding.** For the sake of uniformity, binding must be done through the Students' Supply Association.



**Delivery of Theses.** The student's responsibility for binding and delivery of the thesis will be completed upon submission to the Graduate Dean of a receipt from the Students' Supply Association indicating delivery to it of the original and first and second carbon copies (identified as such in pencil on the title pages), ready for binding, and upon payment of the binding fee.

**Abstracts.** Each candidate is required to furnish abstracts of his master's thesis, one abstract to accompany each copy of the thesis. The abstract is to have a maximum word limitation of 1400 words and should be bound with the thesis, following the bibliography.

### APPROVAL FOR GRADUATION

Securing of approval for graduation and permission to schedule the final examination is the responsibility of the candidate. At the time of registration for courses that will complete all credit requirements for the degree, the student must file with the Dean, on a form provided, a request for such approval. The final examination should not be scheduled until this is obtained.

### FINAL ORAL EXAMINATION

The passing of a final oral examination not fewer than fifteen days prior to graduation is required. It is the duty of the student to schedule the final examination after obtaining from the Chairman of his major department the names of the examining committee. Forms are available for this purpose.

The examination is conducted by a committee of five voting members, to be made up of the members of the Special Committee and others appointed by the Chairman of the major department. The Chairman of the Special Committee is in charge of the examination. Four affirmative votes are needed to pass. Other members of the Graduate Faculty may attend the examination and enter the discussion, but they may not vote.

### TIME LIMIT

All requirements for the master's degree must be completed within six years from the date when the student registers for the first graduate work which is applied toward the degree.

## Degrees

### MASTER OF SCIENCE DEGREE

The master of science degree is awarded upon completion of the requirements listed above.

### MASTER OF ARTS DEGREE

The master of arts degree is awarded upon completion of the requirements listed above, plus satisfaction of the foreign language requirement for the A.B. Degree.

**MASTER OF EDUCATION DEGREE**

The master of education degree is awarded upon completion of the requirements for the master of science degree, with the following exceptions: (1) a satisfactory field project (course 301) may be substituted for the thesis, and (2) a total of 45 hours credit shall be presented in addition to the field project.

The project shall be a study of a practical problem in the field of the candidate's interest as a teacher. The problem is selected and developed by the student, subject to the approval of his Special Committee. A prospectus must be filed in the office of the Graduate School at the time of registration for the prproject. The finished report on the project shall conform to the requirements for a thesis in matters of style, format, and manner of filing. It is recommended that a candidate complete not less than one year as a teacher before beginning the field project.

## **School of Nursing**

L. Bernice Chapman, Director

The basic collegiate program in nursing prepares young men and women to become professional nurses able to fill beginning positions in all the clinical areas of nursing: maternal and child care, medical-surgical nursing, public health nursing, psychiatric nursing, etc. It is expected that these nurses can function productively to contribute to comprehensive patient care, to the prevention of illness, and to the promotion of health through working with patients and with professional and community groups. The program also endeavors to support growth of the individual so that he or she may enjoy a satisfying and useful personal, family, and community life.

The program leads to a Bachelor of Science degree and is planned to meet the requirements and standards for accredited schools of nursing on state and national levels. All instructors are full-time University faculty members and have general and professional educational backgrounds consistent with the academic rank held.

### **Admission Requirement**

Prospective students are advised to take two units of a foreign language, one unit of biology, and one unit of chemistry while in high school.

The student must be admitted to the University for one quarter of prescribed courses following which he or she may be eligible for admission as a nursing student. Only in the Winter Quarter are students admitted to the School of Nursing. Students interested in a nursing major should consult an advisor in the School of Nursing on the day of their first registration in the University.

Eligibility for continued registration in the School of Nursing will be determined on the following criteria: university grades, health records, progress in the program of study, and other records and evaluation tools. An average grade of 'C' must be maintained each quarter.

### **Educational Facilities**

Students use the same facilities and have the same cultural opportunities as all other students on the campus. The newest and most effective teaching aids and equipment are provided in the School of Nursing laboratories and classrooms. The facilities utilized for nursing experience change from year to year depending upon the needs of the students and the learning experiences selected by the faculty. At present, clinical experience is provided in the Latter-day Saint Hospital in Salt Lake City, the Primary Children's Hospital in Salt Lake City, the Utah

Valley Hospital in Provo, Utah State Hospital, Utah City-County Health Department, and other community agencies. The hospitals are approved by the Joint Accreditation Committee of the American Hospital Association, the American College of Surgeons, and the American Medical Association.

The Latter-day Saint Hospital has a capacity of 347 adult beds and bassinets. It provides clinical fields for the practice of medical, surgical, operating room, obstetric, and pediatric nursing.

The Primary Children's Hospital in Salt Lake City, with a bed capacity of over 60 and an isolation unit of 12 beds, provides experience in the "Total Care of the Whole Child."

The Latter-day Saint Utah Valley Hospital has a current capacity of 115 beds and 35 bassinets. Clinical services are offered in medicine, surgery, obstetrics, pediatrics, ophthalmology, and in the out-patient department.

Utah State Hospital is used for experience in Psychiatric Nursing.

The Utah City-County Health Department provides a generalized Public Health Nursing program and offers field experience to students in nursing.

### FEES

Total educational costs **including** board, room, and uniforms are borne by the student. See section titled "University Fees" for a listing of general University expenses. An itemized estimate of the costs for a student in the School of Nursing is available upon request.

### Curriculum

The curriculum of the School of Nursing is organized as a correlated program in keeping with current educational philosophies. Professional and general education begin in the freshman year and continue together throughout the curriculum. The student is oriented to health and normality before proceeding to illness or pathology. Therefore, fundamentals of nursing and care of the mother and child precede medical and surgical nursing.

The course of instruction covers four academic years plus one summer quarter.

Clinical practice is a closely supervised laboratory experience with theory courses given concurrently. Courses which help develop communication skills, social and civic responsibilities, and understanding of human behavior are provided throughout the nursing program.

Students must meet both nursing and general education requirements for graduation. Those students enrolling in the Autumn of 1955 will be affected by revisions under consideration. A schedule of this revised curriculum will be provided upon request.

## Division of Religion

**The President of the University is the Head of  
the Division of Religion**

Sidney B. Sperry, Director of Graduate Studies in Religion  
(122 S).

B. West Belnap, Director of Undergraduate Division (222 S).

The following departments are in the Division of Religion:

Bible and Modern Scripture

Church History

L.D.S. Church Organization and Administration

Theology and Philosophy

The Division of Religion administers all religious instruction and is responsible for the program of religious activities which is sponsored by the University. Through its departments every student in the University is given the opportunity to benefit from religious instruction.

Students in any college of the University who complete thirty-four quarter hours of religious instruction, which must include at least four hours in each of the above-named departments of the Division of Religion, will receive special recognition for such achievement at the time of their graduation.

It has always been the view of the Church of Jesus Christ of Latter-day Saints that in the training of its youth there should be a proper integration of moral and religious values with secular knowledge. From its inception Brigham Young University, firm in the belief that no life is full and complete unless established upon a sound ethical and religious basis, has offered courses in religion.

Brigham Young University is the University for the Church of Jesus Christ of Latter-day Saints. One of its important aims is to develop its students spiritually as well as scholastically, to enable them to live more rounded and complete lives. The faculty of this institution, therefore, are active members and leaders of the Church, all of whom have a deep spiritual insight and the desire to instill this insight into the students with whom they come in contact.

11 have served or are now serving as Mission Presidents.

33 have served or are now serving in General Auxiliary

Boards of the Church.

15 have served or are now serving in Stake Presidencies.

103 have served or are now serving in Ward Bishoprics.

41 have served or are now serving in High Councils.

252 have served in other various auxiliary, teaching, and priesthood capacities in the Church, and 211 are now teaching in auxiliaries or priesthood quorums.

129 have served or are now on leave serving on foreign missions.

All of the officers of the Air Reserve Officer Training Corps are active members of the Church. Three are now serving as members of Bishoprics. Eight have been on missions, and 16 are now actively engaged in administrative and teaching positions in the Church Auxiliaries.

## **Extension Division**

### **ADMINISTRATIVE OFFICERS**

**Ernest L. Wilkinson**, President of the University  
**Harold Glen Clark**, Director of Extension  
**Lynn M. Hilton**, Assistant Director  
**Lucille Spencer**, Assistant Registrar  
**Kiefer B. Sauls**, Treasurer

### **EXTENSION DIVISION COUNCIL**

**Harold Glen Clark**, Chairman. **Ariel S. Ballif**, **B. West Belnap**, **Herald R. Clark**, **Clarence Cottam**, **Gerrit de Jong, Jr.**, **Harvey Fletcher**, **George H. Hansen**, **Lynn M. Hilton**, **Wesley P. Lloyd, J. B. Nash**, **Marion Pfund**, **Antone K. Romney**, **Harvey L. Taylor**, **Clarence Tyndall**, and **Asahel D. Woodruff**.

This council is an advisory body for the Extension Division of the University.

### **CHAIRMEN AND SUPERVISORS OF EXTENSION ACTIVITIES**

**Clarence Tyndall**, Chairman of Audio-Visual Services  
**Jack A. Hartvigsen**, Audio-Visual Consultant and Assistant to Chairman  
**Bernice P. Croft**, Receptionist  
**Afton N. Porter**, Film Librarian  
**Kathryn Hackett**, Bookkeeper  
**Gordon J. Forsyth**, Graphic Arts Supervisor  
**Elbert E. Brown**, Recording Engineer

**Lynn M. Hilton**, Chairman of Adult Education Services  
**Lula Clegg**, Supervisor, Home Study  
**Shirley Evans**, Supervisor, Evening School  
**Loree Brown**, Supervisor, Publication Services  
**Richard Palmer**, Supervisor, Lecture Services  
**R. Max Rogers**, Supervisor, Travel Studies

### **THE EXTENSION DIVISION**

The B.Y.U. Extension Division was established in 1921. The Division at that time combined publicity, off-campus programs, lectures, and community services with the more formal classroom offerings and credit courses both by correspondence and lecture.

Some of these earlier functions have been assumed, in part, by special committees or departments in the University. New services, such as motion pictures and audio aids, have been expanded or added to the Extension Division services.

Full-time employees have replaced those who formerly did extension work during their off-time hours. The extent of the territory served has increased.

Bulletins of information on available evening school courses, Home Study subjects, lectures, and publications are available upon request.

The Extension Division is made up of the following services:

**Audio-Visual Services**

Film Library  
Graphic Arts  
Recordings  
Film Production  
Film Classic

**Adult Education Services**

Evening School  
Off-Campus Courses  
Home Study  
Travel Studies  
Lecture Series  
Non-Credit Courses

**Leadership Week**

**Publication Services**

Assembly Speeches

All teachers of courses scheduled through the Extension Division, with few exceptions, are members of the regular faculty of the Brigham Young University day school listed in this catalog.

## **Audio-Visual Services**

The Brigham Young University Audio-Visual Center is one of the largest and best-equipped teaching aids centers in the nation. Its purpose is to serve the departments of the University, the various church organizations, and the public schools with the finest materials of instruction that can be obtained. It has a wide selection of educational motion pictures, filmstrips, slides, recordings, charts, graphs, and maps.

A magnetic tape recording library of over 1,300 titles is maintained. This includes such items as Brigham Young University devotional speeches and other important addresses given on campus and valuable radio programs of an educational nature. These are available on a rental basis or can be duplicated for permanent retention.

The collection of religious audio-visual aids covers a wide variety of subjects.

Many entertainment shorts are also available.

The Audio-Visual Center serves as a distribution agency for both the rental and sale of Brigham Young University Motion Picture Department Production releases.

The Audio-Visual Center maintains a consultation service to assist individuals or groups with audio-visual problems.

For further information, write or call the Audio-Visual Center. A catalog listing the materials available, conditions of service, and rental rates will be sent upon request.



## Adult Education Services

### EVENING SCHOOL

Every week-day evening, classes are conducted on campus in subject matter areas of interest to adults who desire to improve or enrich their lives through part-time education.

Regular college residence credit equivalent to daytime classes is given for all Evening School Classes. Anyone wishing to do so may take a class on a non-credit basis as an auditor.

Veterans are eligible to enroll under the GI Bill if they meet the eligibility requirements of the Veterans Administration.

There is published quarterly a class schedule of all classes offered on the campus including early morning, late afternoon and evening classes. These class schedules, giving detailed information about all procedures, are available free of charge in the office of the Evening School.

The courses listed in the evening school schedule which do not receive eight or more registrations will be cancelled. Students who have registered in cancelled classes will be notified and invited to join classes in which there are a sufficient number of students or given a full refund.

Evening School students will be registered upon payment of \$4.00 per credit hour plus \$1.00 per registration as a tuition fee. This fee does not include health services or student activity privileges. These may be obtained by paying an additional \$15.00 per quarter to the Treasurer's Office.

Students who register after the officially scheduled registration days are required to pay a late registration fee of \$3.00. Registration is not complete until all fees are paid. (Veterans are required to pay the late fee personally.)

One dollar is charged for each change slip presented after the first week of the quarter, unless the action is caused by the Extension Division.

Each student registered through the Extension Division who discontinues attendance at class **MUST** use the proper procedure to withdraw by coming to the Extension Center. Otherwise, the student will be given an "Incomplete" mark for the course, which mark will be changed to "Failure" if not removed by the next quarter in residence or in one year, whichever is the sooner.

A pro-rated refund of tuition fees will be made to the people who properly withdraw from evening classes during the first four weeks of the quarter. There is no refund for withdrawals occurring after the fourth week of the quarter.

The time and place of evening school registration are listed in the general school calendar in the front of this catalog.

## OFF-CAMPUS COURSES

Many adult groups off-campus make requests for regular credit or non-credit courses to be offered in their locality. A request of this type is filled by scheduling a university teacher to travel to the selected place and conduct the course. These credit courses give Brigham Young University residence credit and may be used to renew a teaching certificate, to apply toward a degree, or to broaden one's intellectual and spiritual horizons. The minimum number of students required for a class is determined by the distance of the class from the campus.

Brigham Young University credit is available to students in off-campus courses sponsored by the University of Utah or Utah State Agricultural College where the course has the prior approval of the Brigham Young University Extension Division, Department Head, and Dean involved. Conversely, courses sponsored by the Brigham Young University Extension Division will register University of Utah and Utah State Agricultural College students where these other institutions approve.

Requests for such courses should be directed to Off-Campus Courses, Extension Division, Brigham Young University. Ordinarily such classes meet one evening a week for eleven weeks. There is a wide choice of courses which may be selected. Almost any course listed in the body of this catalog, subject to the approval of the dean and department head concerned, may be scheduled off-campus.

## HOME STUDY

The Extension Division offers correspondence work, among other services, to aid in widening the educational horizons of the many people who cannot take college work in residence. It is the desire of the Extension Division to assist anyone anywhere who wishes to continue his education. The essential characteristic of Home Study is that the relationship of instructor and student is always individual. The only requirement for registration in Home Study is the assurance to those directing the work that the student is prepared to pursue the course with profit.

Supervised individual instruction from a highly trained instructor has a definite advantage to the correspondence student, but perhaps the greatest advantage comes through the serious application and independent thinking the student must contribute in order to complete his course. His success in the work depends largely upon initiative and eagerness for knowledge and upon the quality of his work.

**1. Credit.** Correspondence courses are not a short cut. With few exceptions each course carries credit equivalent to the corresponding course given in residence.

Not more than 35 hours of the total 186 required for graduation may be correspondence credit.

No graduate credit can be earned in correspondence courses.

Credits are transferable to other standard institutions upon the same basis as standard credits are received at the Brigham Young University.

**2. Registration.** Students may register for Home Study courses at any time during the year. The Home Study catalog contains detailed information and application blanks. It may be obtained free of charge by writing to Home Study, Extension Division, Brigham Young University, Provo, Utah. Additional courses are offered every two years with the publication of a new catalog.

A student may not take correspondence work while in residence without the consent of his dean.

A course may be completed at the rate of not more than three assignments per week. The standard length of courses is five lessons per quarter hour.

The State Department of Public Instruction, State Capitol, Salt Lake City, Utah, or the Department of Public Instruction in the state in which the student resides should be consulted about preparing for teacher's certification.

The Registrar's Office, Brigham Young University, Provo, Utah, will give the necessary information on entrance and graduation requirements and transfers of credits.

**3. Examinations.** Examinations are required in all correspondence courses unless otherwise stipulated. Examinations may be taken in the Extension Division Office, Student Service Center, or elsewhere under the supervision of a responsible school official (principal or superintendent). Examinations will not be given until all lessons are completed.

**4. Fees: Tuition Fees.** The enrollment fee is \$4.00 per quarter hour.

**High School Fees.** The enrollment for a high school course is \$15 for one unit of credit or \$8.50 for one-half unit credit.

No courses will be accepted for graduation unless started at least by March 1. All work must be completed one month before credit is needed.

**U.S.A.F.I. Courses.** The Extension Division is cooperating with the Armed Forces Institute at Madison, Wisconsin, to provide Brigham Young University Home Study courses at a reduced cost to men and women who are on active service in the Army, Navy, Air Force, Marine Corps or Coast Guard. Members of the armed forces who wish to enroll for such courses should contact either education officer or write directly to Home Study, Brigham Young University, Provo, Utah, for specific instructions and special prices for approved courses.

**Veterans.** The Brigham Young University is approved by the Veterans Administration to offer correspondence courses under the G.I. Bill of Rights (P.L. 346, P.L. 16, and P.L. 550).

All veterans should first contact their local Veterans Administration Regional Office and find out whether or not they are still eligible to continue their schooling under the G.I. benefits, and if so what procedures they must follow to do so.

**5. Purchase of Textbooks.** Textbooks may be obtained through application to Home Study at the time of registration. Required texts should be ordered at this time in order to avoid delay in beginning the assignments.

#### **6. Home Study (Correspondence) Courses:**

##### **Accounting**

<b>1x, 2x. Elementary Accounting. (5-5)</b>	<b>Crandall</b>
<b>105x. Accounting Practices. (4)</b>	<b>Crandall</b>
<b>150x, 151x. Intermediate Accounting. (5-5)</b>	<b>Smith</b>

##### **Agronomy**

<b>20x. Cereal Crops. (3)</b>	<b>Farnsworth</b>
<b>22x. Forage Crops. (3)</b>	<b>Farnsworth</b>
<b>41x. Soils. (3)</b>	<b>Farnsworth</b>
<b>105x. Soil Fertility. (3)</b>	<b>Hallam</b>

##### **Animal Husbandry**

<b>2x. History of Breeds of Livestock. (5)</b>	<b>Richards</b>
<b>21x. Elements of Dairying. (5)</b>	<b>Richards</b>
<b>90x. General Poultry. (3)</b>	<b>Morris</b>
<b>154x. Beef Production. (4)</b>	<b>Richards</b>
<b>156x. Swine Production. (3)</b>	<b>Shumway</b>

##### **Art**

<b>39x, 40x. Commercial Art. (2-2)</b>	<b>Jenson</b>
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##### **Bacteriology**

<b>1x. General Bacteriology. (3)</b>	<b>Martin</b>
<b>160x. Bacteriology and Sanitary Science. (3)</b>	<b>Larson</b>

##### **Botany**

<b>3x. Plant Classification. (5)</b>	<b>Harrison</b>
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##### **Business Management**

<b>35x. Mathematics of Business. (3)</b>	<b>Smith</b>
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**Drawing**

- 43x. Elementary Architectural Drawing. (2) Snell  
 47x. Instrumental Perspective. (2) Snell

**Economics**

- 1x. Introduction of Economics. (5) Miller  
 14x. Economic and Financial History of the United States. (3)  
 Miller

**Education**

- 153x. Educ. Adm. Organization and Utah State Law. (3) Barnett  
 157x. Educ. Methods in Safety Education. (2) Hart  
 158x. Educ. Health Education for Teachers. (3) Hart  
 160x. Elem. Educ. Child Growth and Development. (3) Peterson  
 168x. Elem. Educ. Children's Literature. (4) Hammond  
 171x. Educ. History of Education. (3) Romney  
 180x. Phil. of Educ. Guidance Services in the Public Schools. (3)  
 Isaksen  
 193x. Phil. of Educ. Social Foundations of Education. (3) Romney

**English**

- 1x, 2x, 3x. Composition and Literature. (3-3-3) West  
 4x. Business English. (3) Stansfield  
 21x. Advanced English Grammar. (4) West  
 24x. Classic Myths. (4) Carroll  
 31x. Vocabulary Building. (4) Young  
 41x, 42x, 43x. Masterpieces of American Literature. (2-2-2)  
 Thomas  
 71x, 72x, 73x. Masterpieces of English Literature. (2-2-2)  
 Carroll  
 75x. Masters of the English Short Story. (3) B. B. Clark  
 102x. Advanced Creative Writing. (Credit according to work  
 done.) Cheney  
 132x. Victorian Poetry. (3) Carroll  
 133x. Victorian Prose. (3) Carroll  
 164x. The Bible as Literature. (3) Thomas

<b>165x. Greek Life and Drama. (3)</b>	Carroll
<b>185x. Tennyson. (3)</b>	Carroll
<b>186x. Browning. (3)</b>	Carroll
<b>192x. The English Novel to 1832. (4)</b>	B. B. Clark
<b>193x. The Victorian Novel. (4)</b>	B. B. Clark
<b>194x. The Modern English Novel. (4)</b>	B. B. Clark

### Geology and Geography

<b>Geol. 1x. General Geology. (5)</b>	Bissell
<b>Geol. 2x. Physical Geology. (3)</b>	Bissell
<b>Geol. 3x. Historical Geology. (2)</b>	Bissell
<b>Geol. 106x. Geomorphology. (5)</b>	Bullock
<b>Geol. 110x Materials of Ceramics. (3)</b>	Hyatt
<b>Geog. 1x. Elementary Geography. (3)</b>	Bullock
<b>Geog. 123x. Economic Geography. (5)</b>	Bullock

### Health

<b>1x. Personal Hygiene. (2)</b>	Robison
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### History

<b>1x. History of Civilization. (5)</b>	Wilson
<b>20x, 21x, 22x. American History. (3-3-3)</b>	Poll
<b>104x. Greek History. (3)</b>	Wilson
<b>107x. Roman History. (3)</b>	Wilson
<b>110x, 111x, 112x. Medieval History. (3-3-3)</b>	Swensen
<b>121x, 122x, 123x. History of Modern Europe. (3-3-3)</b>	Poll
<b>140x, 141x. History of England. (3-3)</b>	Tyler
<b>150x, 151x. History of Latin America. (3-3)</b>	Tyler
<b>153x. History of Mexico. (3)</b>	Tyler
<b>155x. History of California. (3)</b>	Tyler
<b>166x. History of Utah. (3)</b>	Poll

### Home Economics

<b>50x. Elementary Nutrition. (3)</b>	Barlow
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**Horticulture**

<b>1x. Principles of Pomology. (3)</b>	<b>Ashton</b>
<b>7x. Floriculture. (3)</b>	<b>Reimschiissel</b>

**Journalism**

<b>61x. Newswriting. (3)</b>	<b>Smith</b>
<b>105x. History of Journalism. (5)</b>	<b>Smith</b>
<b>106x. Journalism and Society. (3)</b>	<b>Smith</b>
<b>111x. Magazine Article Writing. (3)</b>	<b>Butterworth</b>

**Landscape Architecture**

<b>7x. Landscape Architecture. (3)</b>	<b>Reimschiissel</b>
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**Mathematics**

<b>11x. College Algebra. (5)</b>	<b>Gardner</b>
<b>12x. Plain Trigonometry. (5)</b>	<b>Gardner</b>
<b>13x. Analytic Geometry. (5)</b>	<b>Hales</b>
<b>101x, 102x. Differential and Integral Calculus. (4-4)</b>	<b>Hales</b>

**Modern and Classical Languages:****French**

<b>107x, 108x, 109x. Second Year Reading. (2-2-2)</b>	<b>Cummings</b>
<b>111x, 112x, 113x. Third Year Reading. (3-3-3)</b>	<b>Cummings</b>
<b>121x, 122x, 123x. Third Year Composition. (3-3-3)</b>	<b>Cummings</b>

**German**

<b>104x, 105x, 106x. Second Year Grammar and Composition. (3-3-3)</b>	<b>Watkins</b>
<b>107x, 108x, 109x. Second Year Reading. (2-2-2)</b>	<b>Rogers</b>
<b>111x, 112x, 113x. Third Year Reading. (3-3-3)</b>	<b>Rogers</b>
<b>121x, 122x, 123x. Third Year Composition. (3-3-3)</b>	<b>Rogers</b>

**Italian**

<b>107x, 108x, 109x. Second Year Reading. (2-2-2)</b>	<b>Cummings</b>
<b>111x, 112x, 113x. Third Year Reading. (3-3-3)</b>	<b>Cummings</b>

121x, 122x, 123x. Third Year Composition. (3-3-3) Cummings

#### Portuguese

104x, 105x, 106x. Second Year Grammar and Composition. (3-3-3)  
de Jong

107x, 108x, 109x. Second Year Reading. (2-2-2) de Jong

111x, 112x, 113x. Third Year Reading. (3-3-3) de Jong

121x, 122x, 123x. Third Year Composition. (3-3-3) de Jong

#### Spanish

104x, 105x, 106x. Second Year Grammar and Composition. (3-3-3)  
Wilkins

107x, 108x, 109x. Second Year Reading. (2-2-2) Wilkins

111x, 112x, 113x. Third Year Reading. (3-3-3) Wilkins

121x, 122x, 123x. Third Year Composition. (3-3-3) Wilkins

#### Music

184x, 185x, 186x. History of Music. (3-3-3) J. H. Wakefield

#### Physics

16x. Descriptive Astronomy. (3) Hales

21x. Weather and Climate. (5) Hales

26x. Elementary Photography. (3-4) Hales

#### Political Science

10x, 111x. U. S. Constitution. (5-5) Grow

#### Psychology

1x. Study Habits. (2) Moffitt

5x. Psychology of Adjustment. (3) Howell

11x. Survey Course. (5) Howell

#### Division of Religion:

##### Bible and Modern Scripture

11x, 12x, 13x. Introduction to Book of Mormon (2-2-2)  
Pearson



101x, 102x, 103x...	Gospel Teachings from the Old Testament.	Rasmussen
(2-2-2)		
113x.	Life of Jesus. (2)	Gunn
114x.	Life and Letters of Paul. (2)	Gunn
121x, 122x, 123x.	Book of Mormon. (2-2-2)	Pearson
131x, 132x, 133x.	The Doctrine and Covenants. (2-2-2)	Doxey
138x.	Pearl of Great Price. (3)	J. R. Clark

### Church History

101x, 102x.	L.D.S. Church History. (2-2)	Berrett
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### Theology

5x, 6x.	Principles and Doctrines of Mormonism. (2-2)	Riddle
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### Secretarial Training

11x, 12x.	Gregg Shorthand. (4-4)	Spencer
31x.	Business English. (3)	Stansfield
110x.	Business Correspondence. (3)	Stansfield

### Sociology

11x.	Elementary Principles of Sociology. (5)	Ballif
128x.	Race and Racial Problems. (3)	Ballif
136x.	Community Organization and Leadership. (3)	Ballif
152x.	Population Problems. (3)	Symons
156x.	Rural Sociology. (3)	Symons
170x.	Marriage and the Family. (3)	Ballif

### Speech

160x.	Theory of Play Production. (3)	Gledhill
180x.	Speech Correction. (3)	Morley

### Zoology and Entomology

175x.	History of Biology. (2)	Tanner
197x.	Genetics and Racial Hygiene. (3)	Tanner

**HIGH SCHOOL COURSES:****English**

**A Study of the Types of Literature.** (One unit credit) Mercer

**Geography**

**Economic Geography.** (One unit credit) Bullock

**History**

**U. S. History.** (One unit credit) Caine

**Mathematics**

**High School Algebra.** (One unit credit) Marshall

**Second Course in Algebra.** (One unit credit) Marshall

**Plane Geometry.** (One unit credit) Miller

**Social Science**

**Problems in a Democracy.** (One unit credit) Caine

**LEADERSHIP WEEK**

Four thousand two hundred and eighty adults registered for the 1954 annual Brigham Young University Leadership Week. This five-day festival of learning is conducted by the faculty and off-campus consultants for the benefit of teachers, officers, bishops, priesthood presidencies, and community and civic leaders everywhere. Just a few of the activities and offerings which stimulate, inspire, and inform Leadership visitors are instruction in how to teach; how to direct music, drama, and speech activities; how to solve teen-age problems; how to teach in and practice the handicraft arts. Instruction in the Scriptures and lectures from the General Authorities and others also add greatly to the interest and value of Leadership Week.

Housing and food are furnished at moderate prices. The doors of the University are open to all free of charge during this week. However, advance registration is necessary to insure housing. The date of the 1955 Leadership Week is June 20-24.

In addition to the general Leadership Week held at the University in Provo each year, local institutes are held by faculty members in other communities upon invitation and the cooperation of the University and of the L.D.S. stakes concerned.

**TRAVEL STUDIES**

The travel-study tours which the Brigham Young University sponsors are designed primarily for students and adults off campus who wish to see and learn more about the most important and best-known sites of historical, cultural, and scenic interest throughout the world.

All of the Brigham Young University travel-study tours are non-commercial, non-profit, educational projects. They are sponsored by a university which recognizes the value of organized educational travel experience, a university which senses the importance of broadening cultural horizons and promoting international understanding and good will.

Opportunities are provided for Brigham Young University travel-study groups to meet many Latter-day Saint mission presidents, missionaries, and members of the Church of Jesus Christ of Latter-day Saints who reside in the distant missions of the Church.

College credit is available to tour participants who complete the study program as outlined by the academic department which is co-sponsoring the travel-study tour.

#### **B.Y.U. Travel-Study Tours for 1955**

- "Student Tour of Europe"
- "Fine Arts Tour of Europe"
- "The Peoples and Cultures Tour of Europe"
- "Tour of South America"
- "Tour of Mexico"
- "World Tour"
- "L.D.S. Church History Tour"

#### **Proposed Travel-Study Tours for 1956**

- "Student Tour of Europe"
- "The Peoples and Cultures Tour of Europe"
- "Europe and the Bible Lands Tour"
- "Tour of Alaska"
- "Tour of Mexico"
- "L.D.S. Church History and Hill Cumorah Pageant Tour"

#### **LECTURE SERIES**

The lecture medium is another way of inviting the University with its specialized personnel into a community and its homes. These lectures broaden understanding of our spiritual, social, and scientific world. The Extension Division draws upon the entire faculty, and it sponsors and encourages the creation of lecture series which are most needed and valuable to intended audiences. Successful lectures have been conducted during 1954-55 in Barratt Hall, Salt Lake City; Tabernacle, Salt Lake City; Old Ogden Tabernacle, Ogden; Brigham Young University campus, Provo; Alpine School District, American Fork; Overton, Nevada. If you are interested in scheduling a series of lectures in your community, write or visit the Extension Division. Following is a list of religious lecture series available.

#### **Lectures Available Through Brigham Young University Extension Division**

- A. Hugh Nibley
  - "The Early Christian Church"
  - 1. Controlling the Past—the Nature of Church History.

2. The New Testament and the Destiny of the Early Church.
  3. The Future of the Church and Early Christian Writers.
  4. The Great Gap Between the Primitive Church and World Christianity.
  5. General and Local Authority in the Early Church.
  6. The Imperial Church of the Fourth Century.
- B. Sidney B. Sperry  
"A Modern Witness to the Christ"
1. Nature and Origin of the Book of Mormon.
  2. Language of the Book of Mormon and Problem of Translation.
  3. Survey of Content of the Book of Mormon.
  4. Great Problems of the Book of Mormon.
  5. Universal Aspects of the Book of Mormon.
- C. Sidney B. Sperry  
"Know Your Doctrine and Covenants"
1. Nature of Revelation and Inspiration in the Doctrine and Covenants.
  2. Revelations Given Before the Organization of the Church.
  3. Revelations Given After the Organization up to November, 1831.
  4. How the Doctrine and Covenants Came into Formal Existence.
  5. Revelations Affecting Our Knowledge of Man's Future Destiny.
- D. Lynn A. McKinlay  
"The Spirit Giveth Life"
1. Faith in the Lord Jesus Christ.
  2. Repentance unto Life
  3. Baptism for the Remission of Sins.
  4. The Gift of the Holy Ghost.
  5. Seek and Ye Shall Find.
- E. James R. Clark  
"The Pearl of Great Price Through Forty Centuries"
1. New Light on the Chandler Story of the Papyrus of Abraham.
  2. The Translation of the Records of the Ancients.
  3. Abraham—Christian Missionary—20th Century B.C.
  4. The Dead Yet Speaketh—Cosmography of Abraham and Moses.
  5. Preserving God's Revelations—From Manuscripts to Standard Works.
- F. Glenn L. Pearson  
"The Book of Mormon in Its Own Defense."
1. The Case for New Revelation.
  2. Christ's Mission Clarified.
  3. The Case of the Unfulfilled Promise.
  4. The Reader on Trial.
  5. The Final Judgment.

- G. Lynn M. Hilton  
"Judah Thy God Reigneth"  
1. A Hiss and a By-Word Among All People.  
2. Nursing Fathers . . . and Mothers for Judah.  
3. The Fullness of the Gentiles.  
4. The First Shall Be Last Then Shall Judah . . . Be Pleasant.  
5. Unto the Lord . . . As in Former Years.
- H. Roy W. Doxey  
"Life After Death"  
1. Will I Attend My Own Funeral?  
2. Is the Spirit World a Place of Education?  
3. Do the Dead Receive Their Bodies?  
4. Are All to be Saved?  
5. What is Heaven Like?
- I. Samuel C. Chandler  
"Great Latter-day Saint Books"  
1. Characteristics of Latter-day Saint Books and Writers.  
2. The Young Church-Books Produced 1830-1847.  
3. Building Zion—Books from 1847-1890.  
4. Explanations and Ideas—1890-1930.  
5. Recent Books and Discourses—1930 to date.
- J. Reid E. Bankhead  
"Selected Topics from the Book of Mormon"  
1. Book of Mormon, Higher Criticism, and the New Testament.  
2. Samuel The Lamanite's Message on the Dead and Living Prophets.  
3. Lamanites and the New Jerusalem.  
4. Book of Mormon Prophecies Concerning the Holy Ghost.  
5. Theme Song of the Book of Mormon.
- K. Henry L. Nicholes  
"Diet and Health"  
1. Health and Diet—To a Certain Extent You Are What You Eat.  
2. Health and Hormones—The Mysterious Chemical Factories of the Body.  
3. Health and Heredity—Why We Resemble Our Ancestors.  
4. Health and Drugs—One Man's Meat May Be Another Man's Poison.  
5. Health and Cancer—Renegade Cells.
- L. David H. Yarn, Jr.  
"From Darkness Into Light"  
1. I Am the Light of the World.  
2. He That Receiveth Light, and Continueth in God, Receiveth More Light.  
3. The Light Giveth Life to All Things.  
4. A Light Shall Break Forth.  
5. The Light Which Shineth in Darkness.
- M. Francis W. Kirkham  
"A New Witness for Christ in America"  
1. The Coming Forth of the Book of Mormon.  
2. The Translation of the Book of Mormon.

3. The Publication of the Book of Mormon.
  4. Attempts to Prove the Book of Mormon Man-Made (I).
  5. Attempts to Prove the Book of Mormon Man-Made (II)
- N. Ivan J. Barrett  
"Joseph Smith the Extraordinary"
- O. Gustive O. Larson  
"Mormonism and the American Frontier"
1. The Great Basin Before Mormon Settlement.
  2. Origin and Pre-Utah Development of Mormonism.
  3. Exploration and Colonizing.
  4. Proselyting and Emigration.
  5. Mormon Contributions to Frontier Development.

### PUBLICATION SERVICES

All devotional assembly speeches, as well as many lecture series, are reproduced in mimeographed form by the Publication Services of the Extension Division. These are sold at cost.

At the end of each school year complete sets of the assembly speeches are bound in post binders and may be purchased from the Extension Division. These are particularly valuable in ward or home religious libraries.

In addition, the following programs and series are mimeographed: Leadership Week proceedings, Know Your Religion lectures, and What's our Name? (20 TV shows on genealogical research).

Missionaries, teachers in Sunday School classes and other church auxiliaries, classes, speakers, and students of the scriptures find these publications stimulating because of the timely stories, interpretations of current events, and faith promoting experiences presented to the student body of the University.

For full details about available stock and prices, write to the Publication Services, Extension Division, Brigham Young University, Provo, Utah.

## **L.D.S. Business College**

Kenneth S. Bennion, Director

The Latter-day Saints Business College in Salt Lake City became a part of Brigham Young University on June 1, 1952. The College was founded on November 15, 1886, by the L.D.S. Church. It had its beginning in the old Social Hall, which once stood at the entrance to the present Social Hall Avenue between South Temple and First South on State Street. The name at that time was Salt Lake Stake Academy. This was soon changed to Latter-day Saints College, then to Latter-day Saints University, and finally back to Latter-day Saints College. The High School and Junior College Departments were closed in June, 1931. Since that time the Business College has been operated alone.

The first principal of the Salt Lake Stake Academy was Karl G. Maeser, at that time head of the Brigham Young Academy, now Brigham Young University. In direct charge of the school was Willard Done, who soon became principal. Those who have administered the affairs of the school include Willard Done, 1886-88; James E. Talmage, 1888-92; Willard Done, 1892-99; Joshua H. Paul, 1899-1905; Willard Young, 1905-16; Guy C. Wilson, 1916-26; Feramorz Y. Fox, 1926-48; Kenneth S. Bennion, 1948-52 as president, now serving as director; Ernest F. Wilkinson, 1952-.

Very soon after the founding of the L.D.S. College, in 1886, there was developed a commercial department to help young men and women qualify for office positions in Salt Lake City's expanding field of business. The recent affiliation of the L.D.S. Business College with Brigham Young University offers many advantages to students. One of these is that of credit recognition at the parent institution.

Courses are offered to develop proficiency in the following areas: Secretarial, Executive Secretarial, Junior Accounting, and Higher Accounting.

Courses at the L.D.S. Business College parallel those offered at the Brigham Young University. For descriptions of courses, refer to appropriate departments and course numbers indicated in the following list of titles.

### **Accounting, Lower Division**

1. Elementary Accounting (5)
2. Elementary Accounting. (5)
26. Office Machines. (2)

### **Accounting, Upper Division**

149. Cost Accounting. (3)

- 150, 151, 152. Intermediate Accounting. (5-5-5)
- 187. Municipal and Governmental Accounting. (3)
- 188. Federal and State Taxes. (4)
- 194. Auditing Theory and Practice. (5)

#### **Accounting, Graduate Division**

- 280. Advanced Accounting. (5)
- 296, 297, 298. C.P.A. Coaching. (4-4-4)

#### **Management, Lower Division**

- 35. Mathematics of Business. (3)

#### **Economics, Lower Division**

- 1. Economic Principles. (5)
- 2. Contemporary Economic Problems. (5)

#### **Finance and Banking, Upper Division**

- 157. Commercial Law. (4)
- 158. Commercial Law. (4)

#### **Marketing, Upper Division**

- 108. Salesmanship. (2)

#### **Secretarial Training, Lower Division**

- 11. Elementary Shorthand. (4)
- 12. Elementary Shorthand. (4)
- 13. Elementary Shorthand Dictation. (4)
- 14. Shorthand Theory Review and Speed Building. (4)
- 15. Shorthand Speed Building and Transcription. (4)
- 21. Elementary Typewriting. (2)
- 22. Typewriting Speed Building. (2)
- 23. Typewriting Speed Building. (2)
- 24. Mechanical Business Letters and Forms. (2)
- 26. Office Machines. (2)
- 31. Business English. (3)



**Secretarial Training, Upper Division**

- 151. Advanced Shorthand Transcription and Speed Building. (4)
- 152. Advanced Shorthand Speed Building. (4)
- 153. Advanced Shorthand Speed Building and Reporting. (4)
- 154. Office Techniques. (3)
- 155. Secretarial Procedures and Directed Business Training. (5)
- 160. Office Organization and Management. (3)
- 184. Court Reporting. (4)

**Sociology, Lower Division**

- 13. Courtship and Marriage. (3)

**Division of Religion, Lower Division**

- 4, 5. The Principles and Doctrines of Mormonism. (4-4)

Other courses are offered occasionally, depending upon the demand. Though they are not named above, they parallel courses offered on the campus of Brigham Young University. Some offerings are arranged by the Extension Division of Brigham Young University. In addition, the following non-credit courses are offered:

**Beginning Business Mathematics.**

**Penmanship.**

## McCune School of Music and Art

N. Lorenzo Mitchell, Director

On September 1, 1952, the McCune School of Music and Art, established in Salt Lake City, Utah, in 1920, became a part of the Brigham Young University. N. Lorenzo Mitchell, the administrator of the McCune School since 1950, continues as the director.

An insistence on the maintenance of high artistic standards since its establishment has given the McCune School an enviable reputation for the contribution it has made to Utah's development in music, art, the dance, and speech. Its faculty is large and represents the highest type of professional and academic training. Many of the leading personalities in the arts are listed with the faculty of the school.

Academically, the work done at the McCune School is in two divisions: (1) The preparatory—that is, all class and individual instruction that does not receive college credit; and (2) the college, wherein college credit is given for class and individual instruction to those students who have met entrance requirements of the University. Any college credit earned at the McCune School of Music and Art may be applied toward graduation with the degree of Bachelor of Arts from the University.

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**Statistical Summaries — 1954-55**  
**UNIVERSITY 1954-55 CUMULATIVE AUTUMN, WINTER, AND SPRING ENROLLMENT,**  
**BRIGHAM YOUNG REGULAR DAY TIME COLLEGE STUDENTS, PROVO CAMPUS**  
**ACCORDING TO STATES AND FOREIGN COUNTRIES**  
**AS OF APRIL 15, 1955**

[illegible]



**L.D.S. BUSINESS COLLEGE  
SALT LAKE CITY CAMPUS  
AS OF MARCH 31, 1955**

Day School:	Men	Women	Total
College Level .....	145	257	402
High School Level .....	16	12	28
Night School:			
College Level .....	123	262	385
High School .....	2		2
<b>TOTAL</b> .....	<b>286</b>	<b>531</b>	<b>817</b>

**McCUNE SCHOOL OF MUSIC  
SALT LAKE CITY CAMPUS  
AS OF MARCH 31, 1955**

College Level .....	45	250	295
High School Level .....	69	265	334
Elementary Level .....	132	742	874
<b>TOTAL</b> .....	<b>246</b>	<b>1257</b>	<b>1503</b>

**ENROLLMENT SUMMARY — 1954-55  
PROVO AND SALT LAKE CITY CAMPUSES  
AS OF MARCH 31, 1955**

College Level:	
Daytime Residence Students	
Brigham Young University, Provo, Utah .....	9898
L.D.S. Business College, Salt Lake City, Utah .....	402
McCune School of Music, Salt Lake City, Utah .....	295
Total Daytime Residence Students .....	10595
Evening Residence Students	
Brigham Young University, Provo, Utah .....	840
L.D.S. Business College, Salt Lake City, Utah .....	385
Total Evening Residence Students .....	1225
Extension and Correspondence Students	
Brigham Young University, Provo, Utah .....	2339
High School and Elementary School Students	
Brigham Young University High School .....	347
Brigham Young University Training School .....	207
L.D.S. Business College .....	30
McCune School of Music .....	1208
Total .....	1792

\*Grand Total of Students on Three Campuses .....**15,951**

\* This figure represents total students less 703 duplications between Summer School and the 1954-55 year.

**BRIGHAM YOUNG UNIVERSITY 1954-55 CUMULATIVE AUTUMN, WINTER, AND SPRING ENROLLMENT,  
REGULAR DAY TIME COLLEGE STUDENTS, PROVO CAMPUS  
FROM STAKES AND MISSIONS  
AS OF APRIL 15, 1955**

Western States .....	49	Davis .....	33	Grantsville .....	15	Mesa .....	61
Stakes .....		Millard .....	38	North Weber .....	11	Millcreek .....	12
Alberta .....	36	Denver .....	42	Gridley .....	26	Minidoka .....	22
Alpine .....	113	Deseret .....	71	Gunnison .....	25	Moapa .....	30
American Falls .....	11	Detroit .....	17	Highland .....	41	Montpelier .....	31
Bakersfield .....	18	Duchesne .....	17	Hillside .....	36	Monument Park .....	15
Bannock .....	11	East Cache .....	7	Houston .....	20	Moon Lake .....	11
Bear Lake .....	15	East Jordan .....	26	Humboldt .....	15	Morgan .....	7
Bear River .....	15	East Long Beach .....	34	Hyrum .....	14	Moroni .....	13
Beaver .....	14	East Los Angeles .....	69	Idaho .....	11	Mt. Graham .....	21
Ben Lomond .....	24	East Mill Creek .....	23	Idaho Falls .....	37	Mt. Jordan .....	54
Benson .....	9	East Ogden .....	33	Inglewood .....	38	Mount Logan .....	1
Berkeley .....	48	East Phoenix .....	17	Juab .....	40	Mount Ogden .....	18
Big Horn .....	46	East Provo .....	318	Juarez .....	16	Mt. Rubidoux .....	40
Blackfoot .....	17	East Rigby .....	5	Kanab .....	20	Murray .....	11
Blaine .....	11	East Riverside .....	5	Klamath .....	15	Nampa .....	67
Boise .....	28	East Sharon .....	161	Kolob .....	188	Nebo .....	89
Bonneville .....	47	El Paso .....	13	Lake View .....	8	Nevada .....	28
Bountiful .....	26	Emery .....	22	Las Vegas .....	87	New York .....	33
Burley .....	51	Emigration .....	17	Layton .....	20	North Box Elder .....	24
Butte .....	13	Ensign .....	29	Lehi .....	63	North Carbon .....	18
Cache .....	5	Farr West .....	11	Lethbridge .....	34	North Davis .....	20
Calgary .....	13	Florida .....	10	Liberty .....	14	North Idaho Falls .....	26
Cannon .....	2	Franklin .....	25	Logan .....	1	North Jordan .....	40
Carbon .....	34	Fresno .....	24	Long Beach .....	50	North Pocatello .....	10
Cassia .....	13	Garfield .....	21	Lorin Farr .....	22	North Rexburg .....	7
Cedar .....	17	Glendale .....	74	Los Angeles .....	50	North Sacramento .....	17
Chicago .....	25	Gooding .....	18	Lost River .....	4	North Sanpete .....	41
Columbia River .....	42	Grand Coulee .....	12	Lyman .....	25	North Sevier .....	14
Cottonwood .....	29	Granite .....	34	Malad .....	44	North Tooele .....	24
Dallas .....	16	Grant .....	17	Maricopa .....	34		

# STATISTICAL SUMMARIES

Nysa .....	40	San Bernardino .....	45	Summit .....	7	California .....	44
Oahu .....	40	San Diego .....	52	Tacoma .....	20	Canadian .....	7
Oakland .....	47	San Fernando .....	51	Taylor .....	42	Central American .....	1
Ogden .....	27	San Francisco .....	19	Temple View .....	14	Central Atlantic .....	
Oneida .....	33	San Joaquin .....	27	Teton .....	16	States .....	32
Oquirrh .....	18	San Jose .....	17	Timpanogos .....	80	Central States .....	36
Orange County .....	18	San Juan .....	33	Tooele .....	14	Danish .....	4
Orem .....	113	San Luis .....	27	Twin Falls .....	65	East Central States ..	9
Palmyra .....	145	Santa Barbara .....	27	Uintah .....	55	East German .....	1
Palo Alto .....	49	Santa Monica .....	42	Union .....	39	Eastern States .....	32
Panguitch .....	29	Santaquin-Tintic .....	27	University .....	10	Finnish .....	3
Park .....	12	Santa Rosa .....	16	Utah .....	205	French .....	2
Parowan .....	12	Seattle .....	53	Uvada .....	19	Great Lakes .....	20
Pasadena .....	63	Sevier .....	61	Wasatch .....	63	Hawaiian .....	32
Phoenix .....	38	Sharon .....	92	Washington .....	45	Japanese .....	5
Pioneer .....	7	Shelley .....	14	Wayne .....	22	Mexican .....	14
Pocatello .....	14	Smithfield .....	13	Weber .....	11	Near East .....	1
Portland .....	57	Snowflake .....	61	Weiser .....	30	New England .....	22
Portneuf .....	12	South Bear River .....	23	Wells .....	9	New Zealand .....	1
Provo .....	211	South Blackfoot .....	28	West Boise .....	30	North Central .....	
Raft River .....	3	South Box Elder .....	20	West Jordan .....	40	States .....	21
Reno .....	29	South Carolina .....	7	West Pocatello .....	17	Northern California ..	7
Rexburg .....	15	South Davis .....	9	West Utah .....	121	Northern States .....	27
Richland .....	47	South Idaho Falls .....	63	Wilford .....	22	Northwestern States ..	41
Rigby .....	22	South Los Angeles .....	39	Willamette .....	27	Norwegian .....	1
Riversdale .....	9	South Ogden .....	17	Woodruff .....	24	Samoan .....	2
Riverside .....	3	South Salt Lake .....	12	Yellowstone .....	12	Southern States .....	29
Roosevelt .....	42	South Sanpete .....	32	Young .....	51	Spanish American .....	7
Sacramento .....	29	South Sevier .....	43	Zion Park .....	18	Southwest Indian .....	2
St. George .....	36	South Summit .....	41	<b>MISSIONS</b>		Swiss-Austrian .....	1
St. Johns .....	35	Southern Arizona .....	15			Tahitian .....	1
St. Joseph .....	14	Spokane .....	28			Texas-Louisiana .....	16
Salmon River .....	13	Star Valley .....	32			West Central States ..	34
Salt Lake .....	12	Sugar House .....	16	Australian .....	3	Western Canadian .....	14
				Brazilian .....	4		
				British .....	2		

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